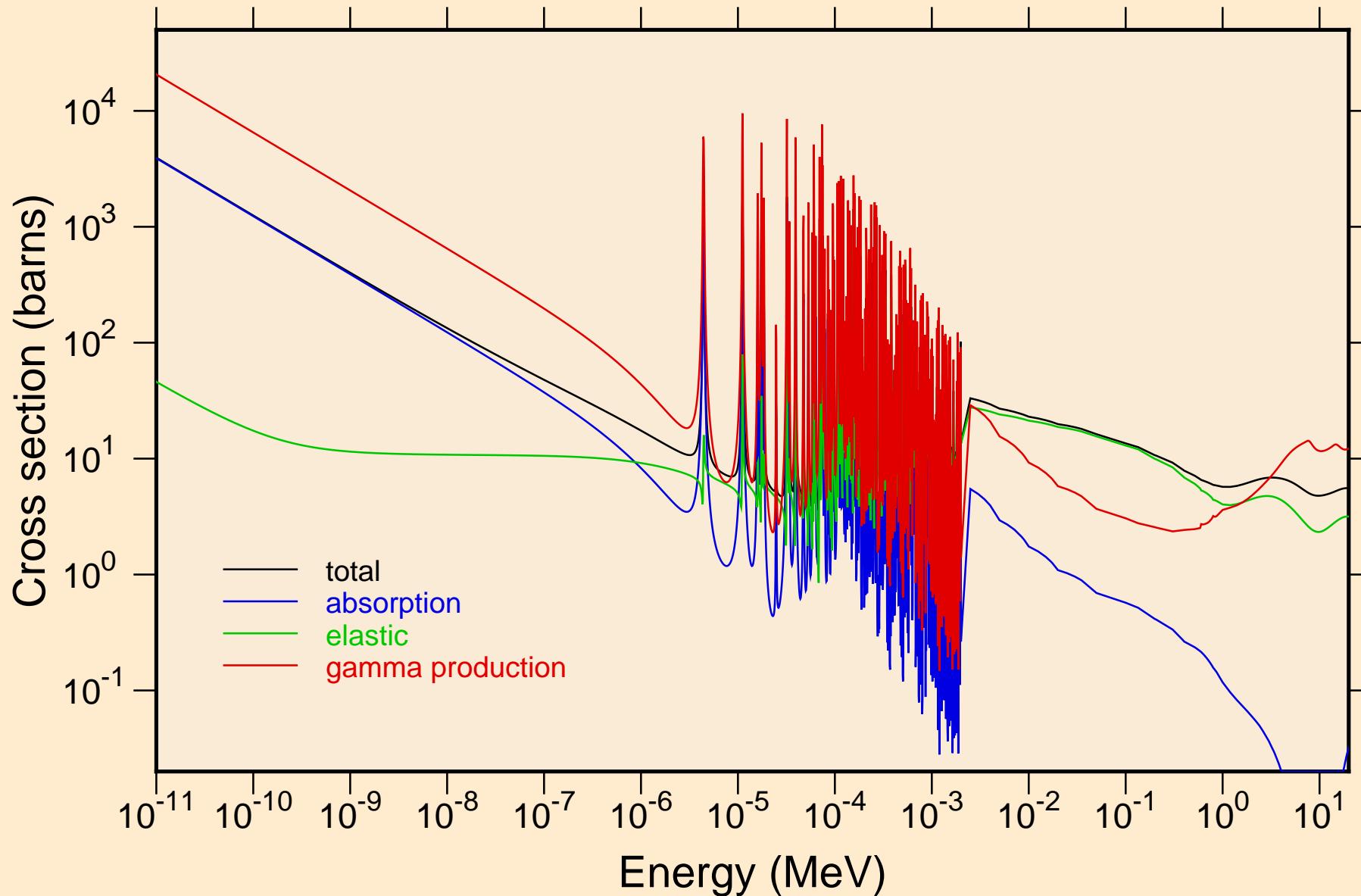


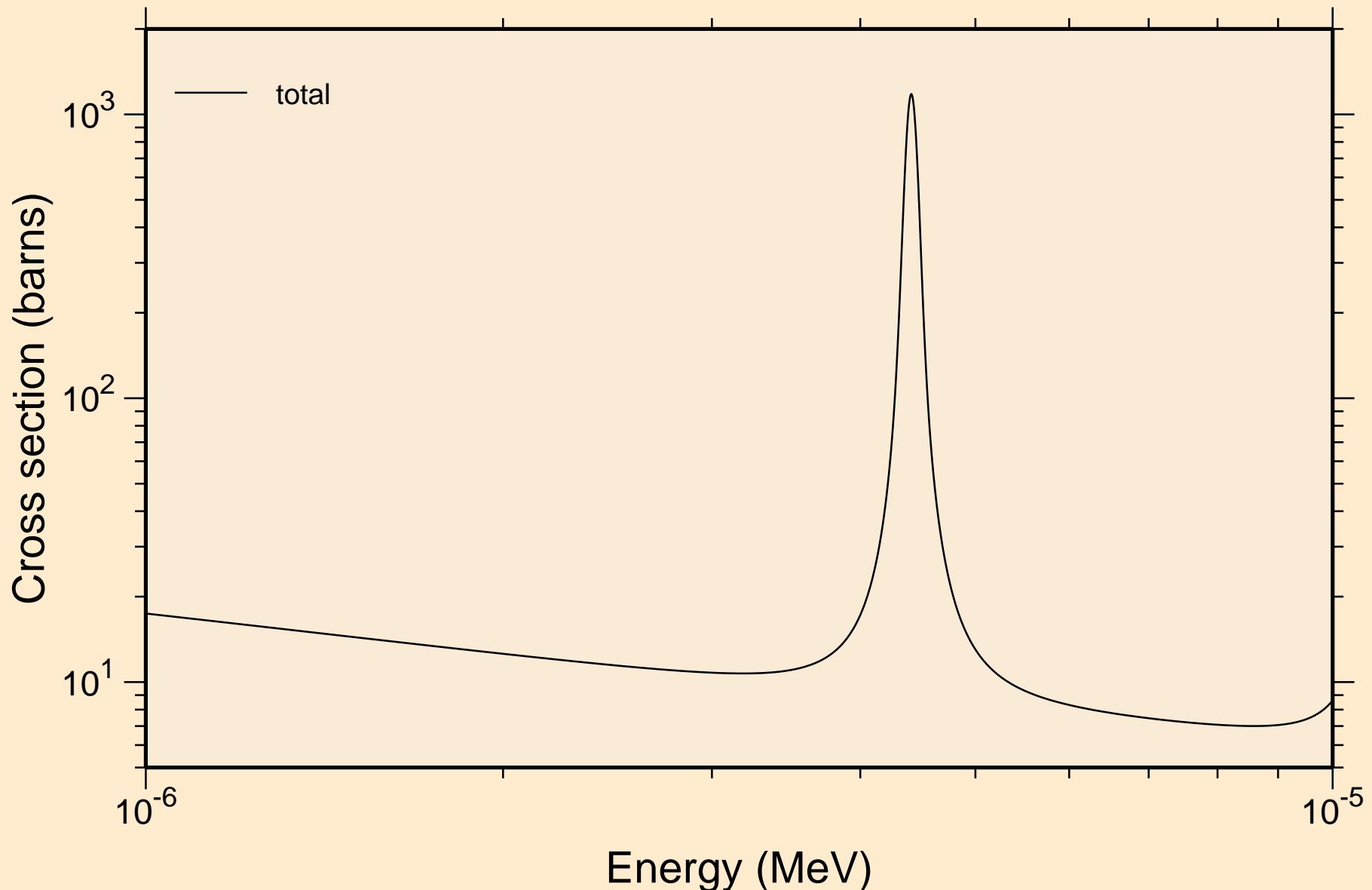
# ADVANCE CALCULATIONS

## Principal cross sections



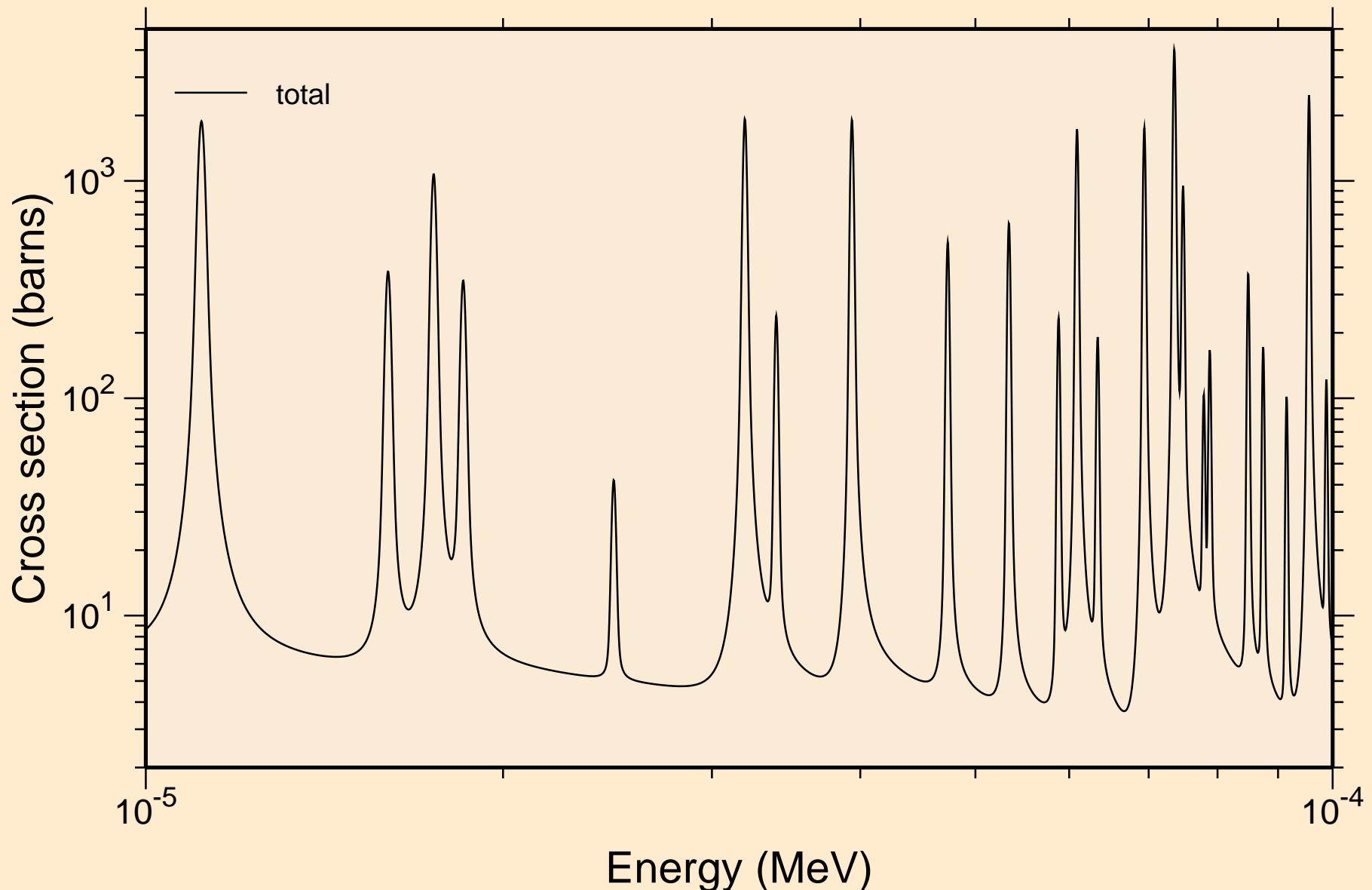
# ADVANCE CALCULATIONS

## resonance total cross section



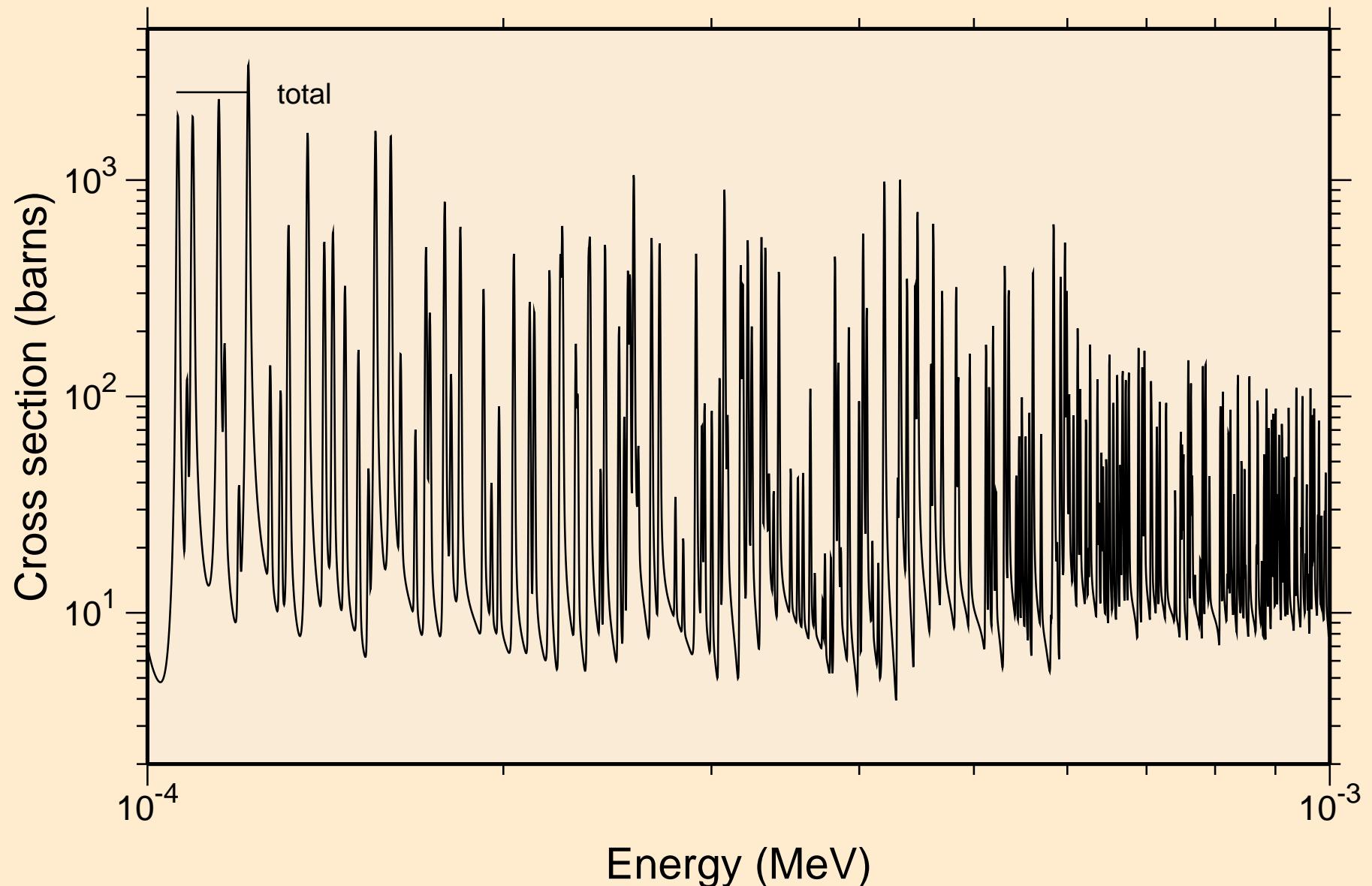
# ADVANCE CALCULATIONS

## resonance total cross section



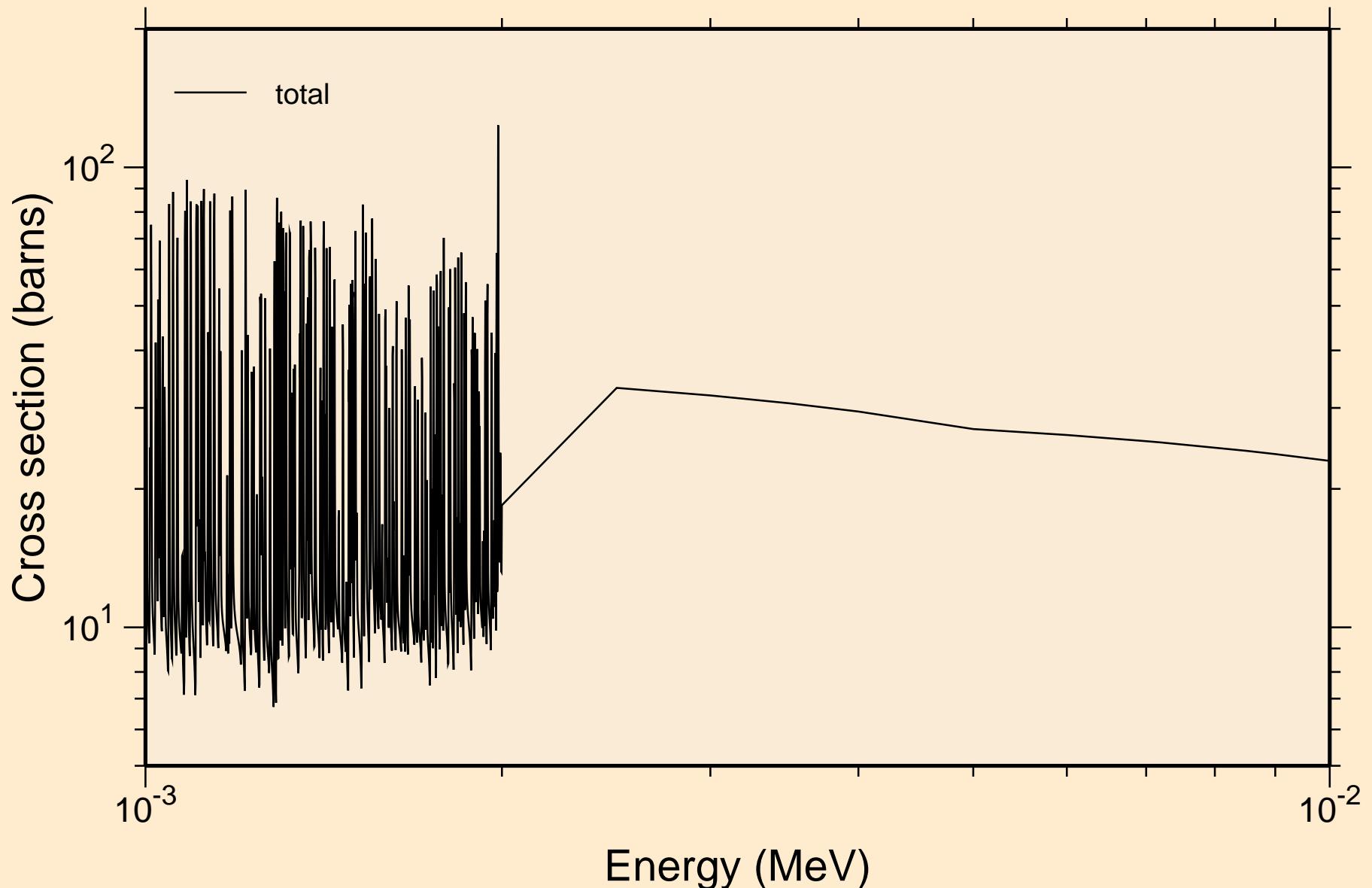
# ADVANCE CALCULATIONS

## resonance total cross section



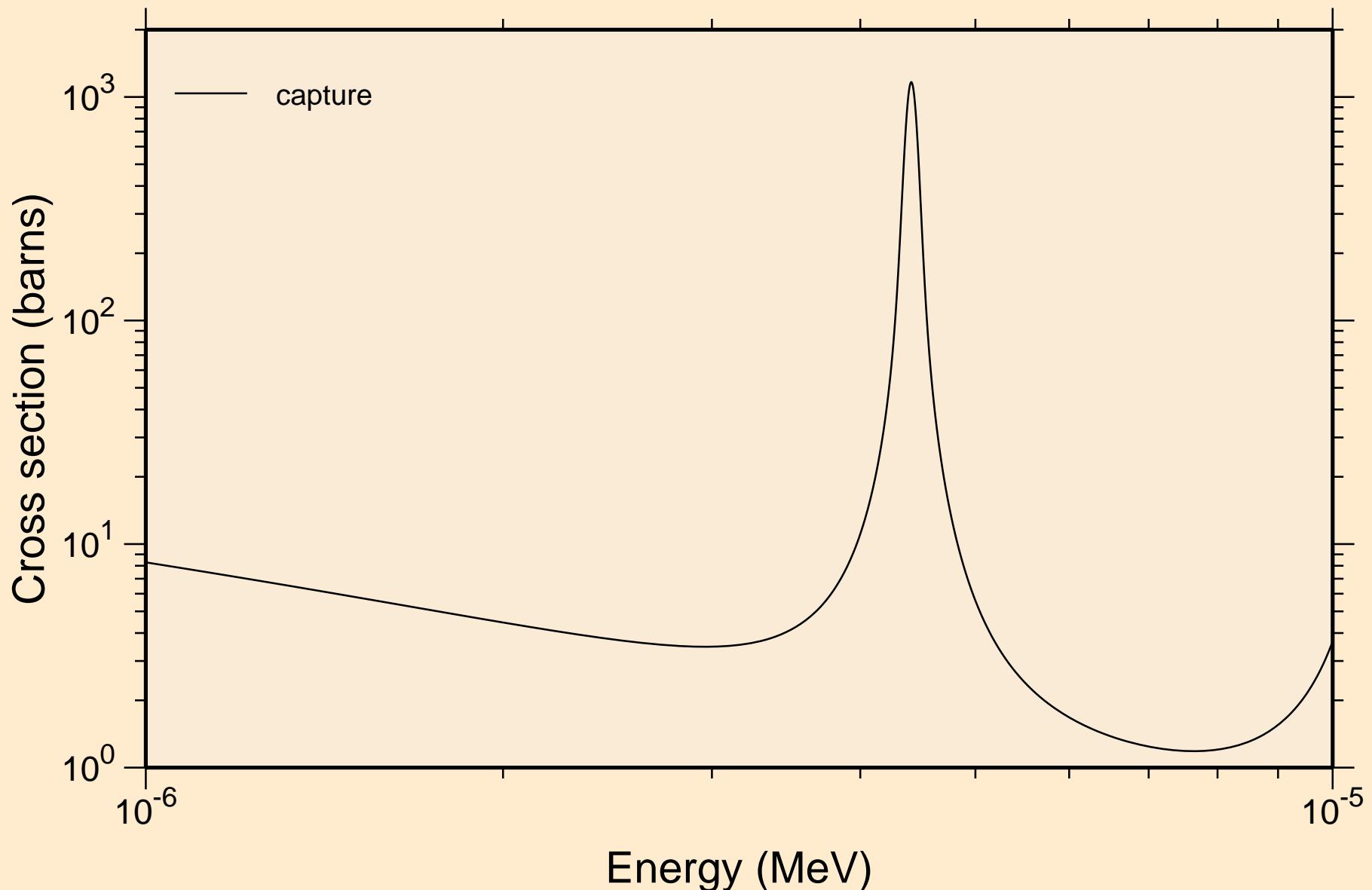
# ADVANCE CALCULATIONS

## resonance total cross section



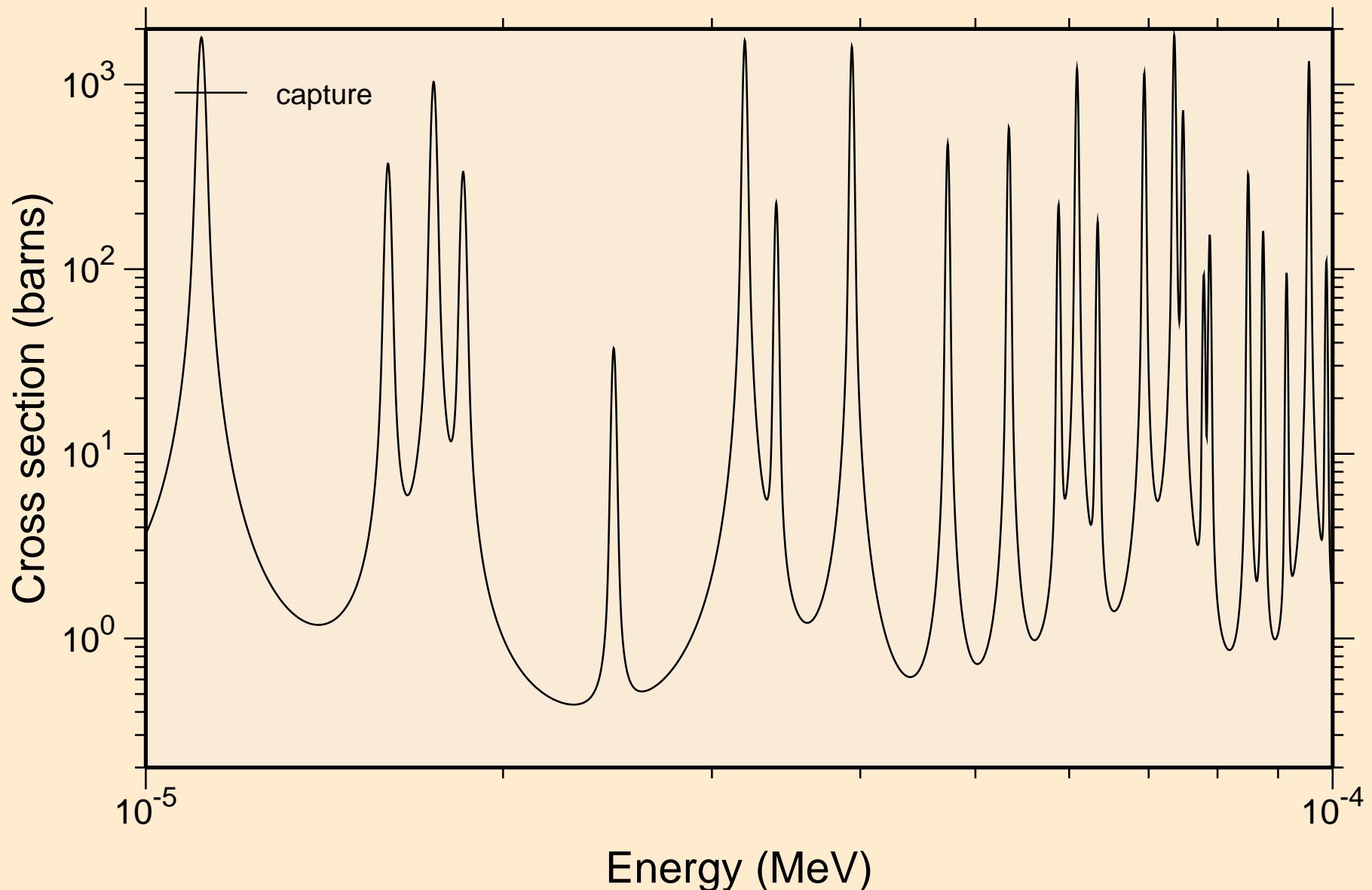
# ADVANCE CALCULATIONS

## resonance absorption cross sections



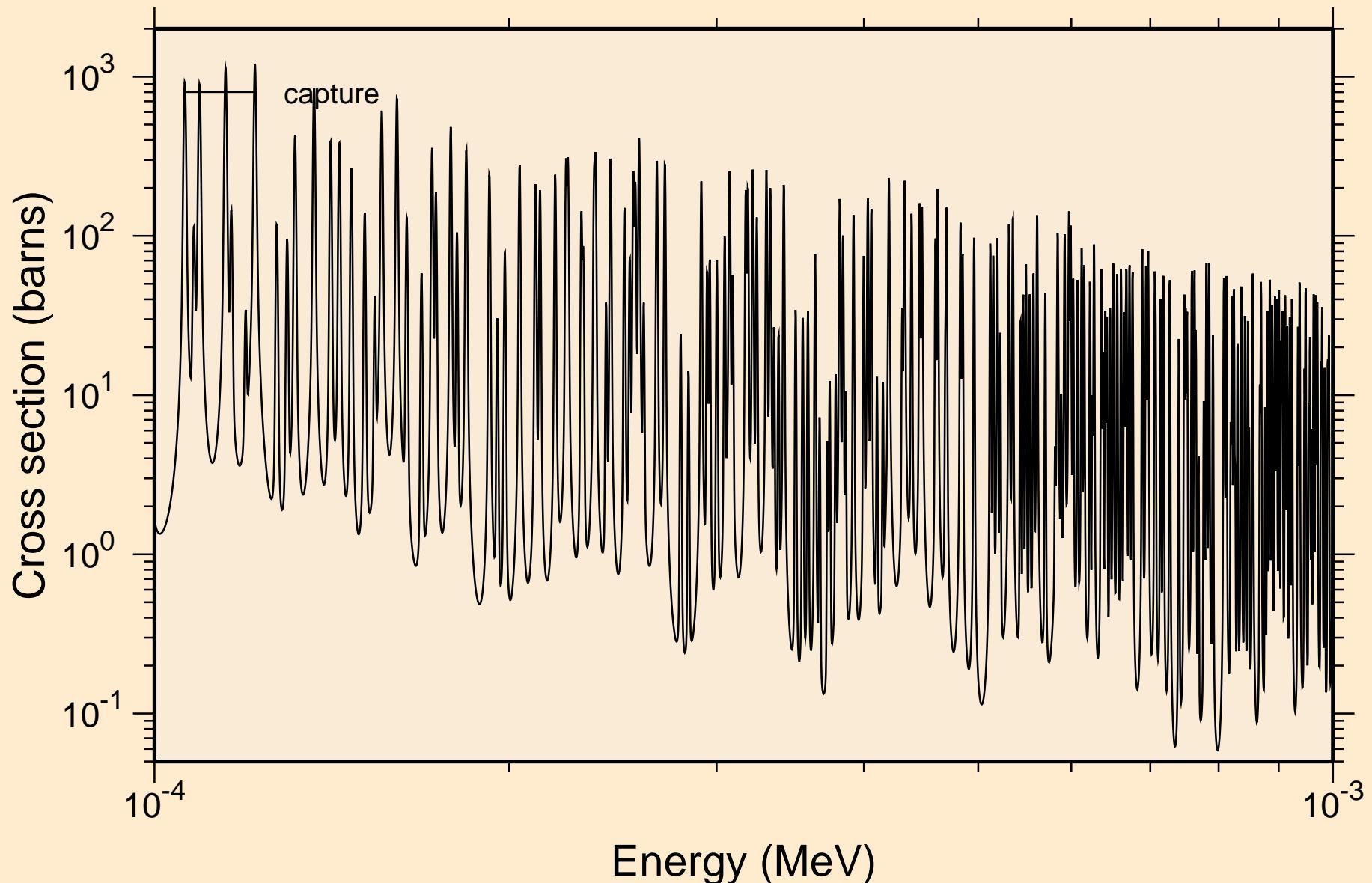
# ADVANCE CALCULATIONS

## resonance absorption cross sections



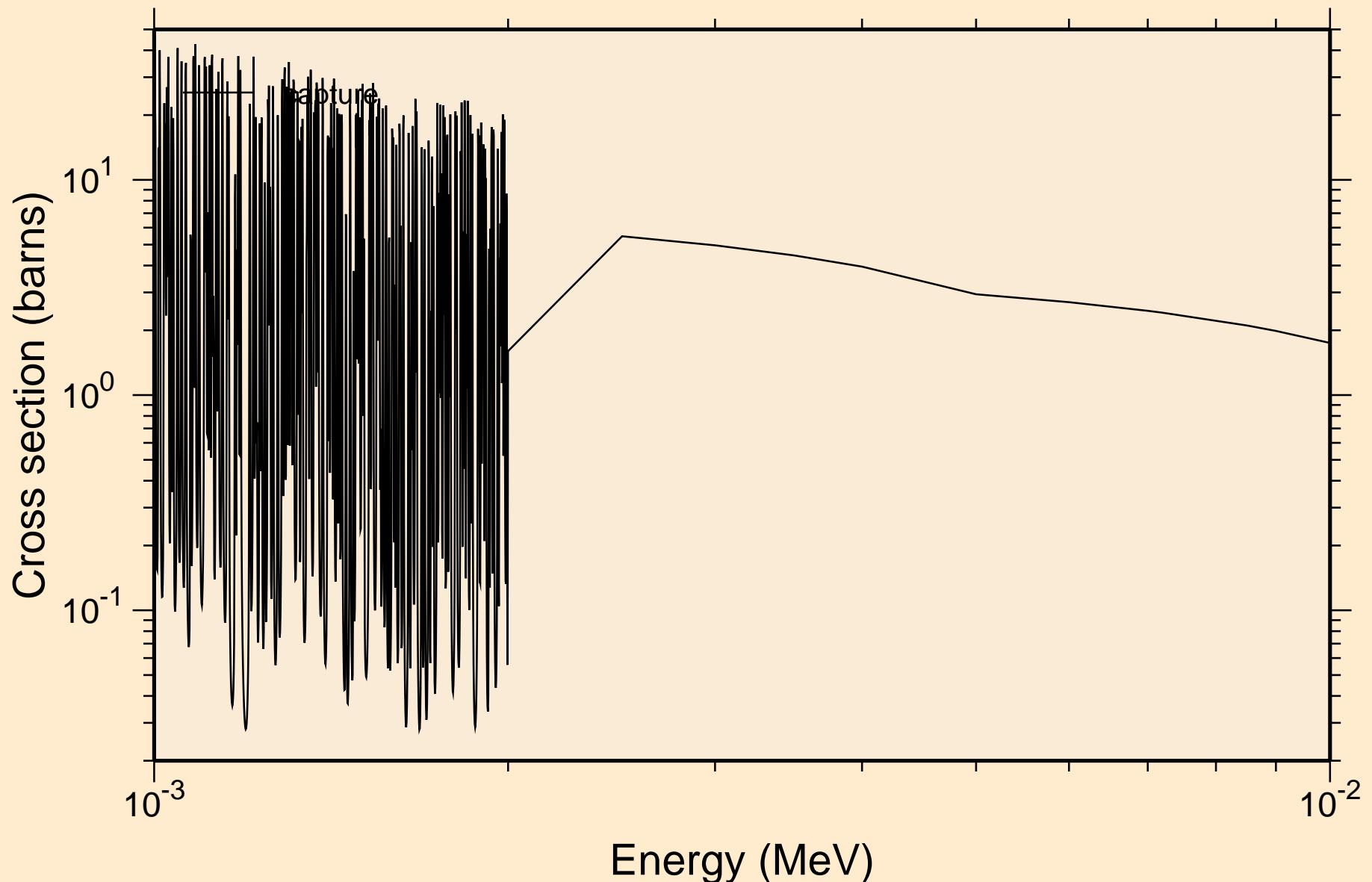
# ADVANCE CALCULATIONS

## resonance absorption cross sections



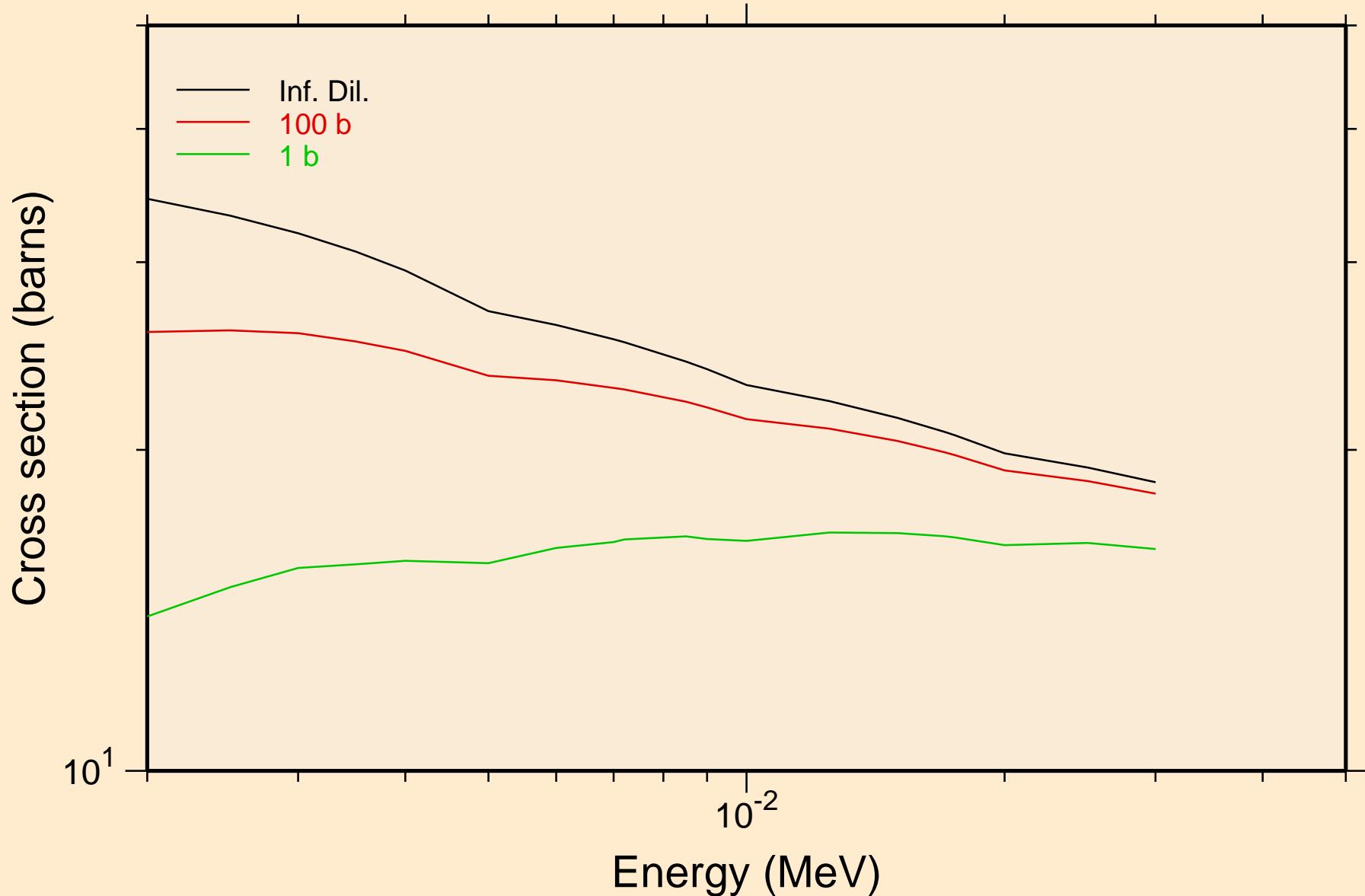
# ADVANCE CALCULATIONS

## resonance absorption cross sections



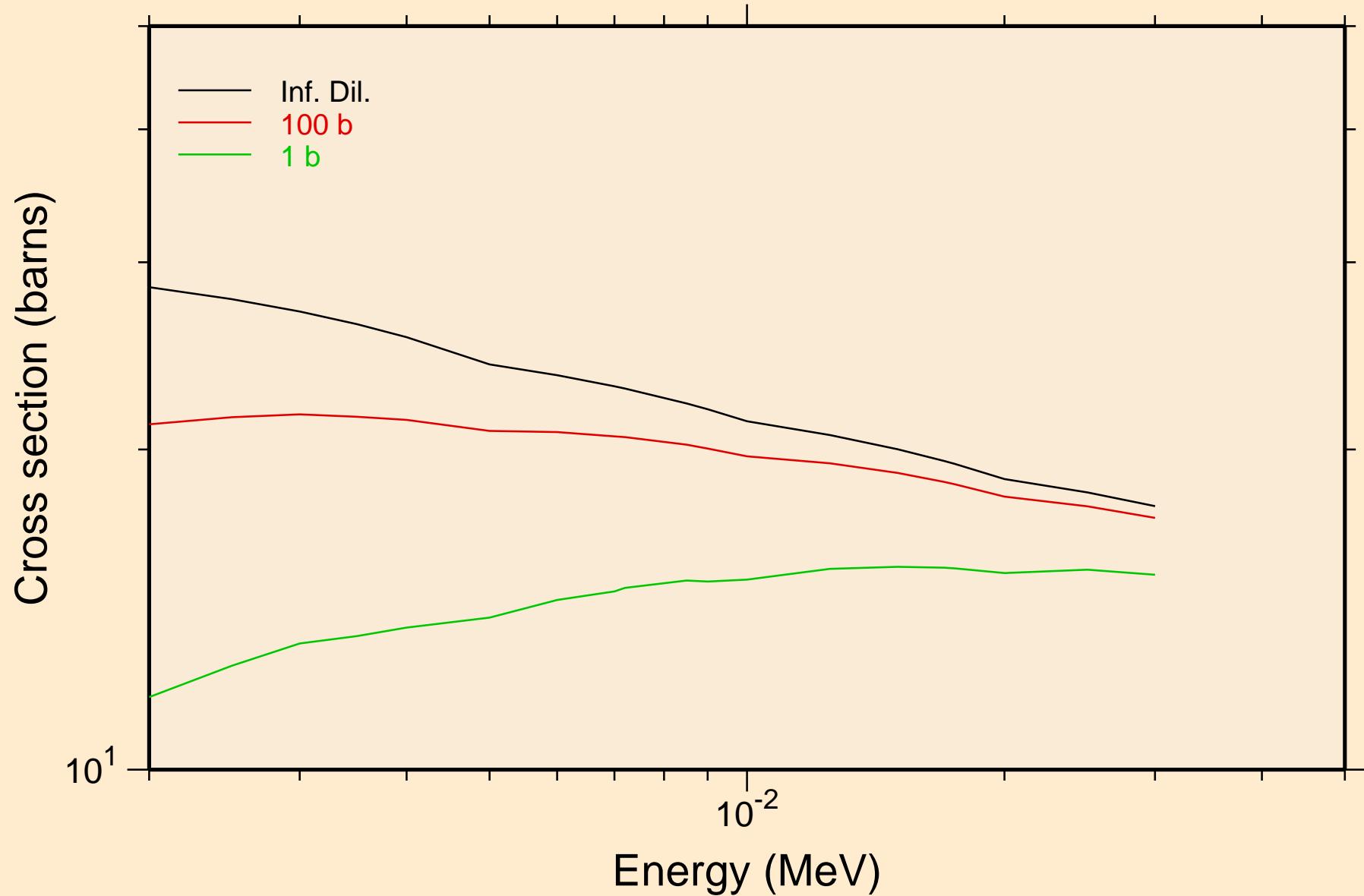
# ADVANCE CALCULATIONS

## UR total cross section



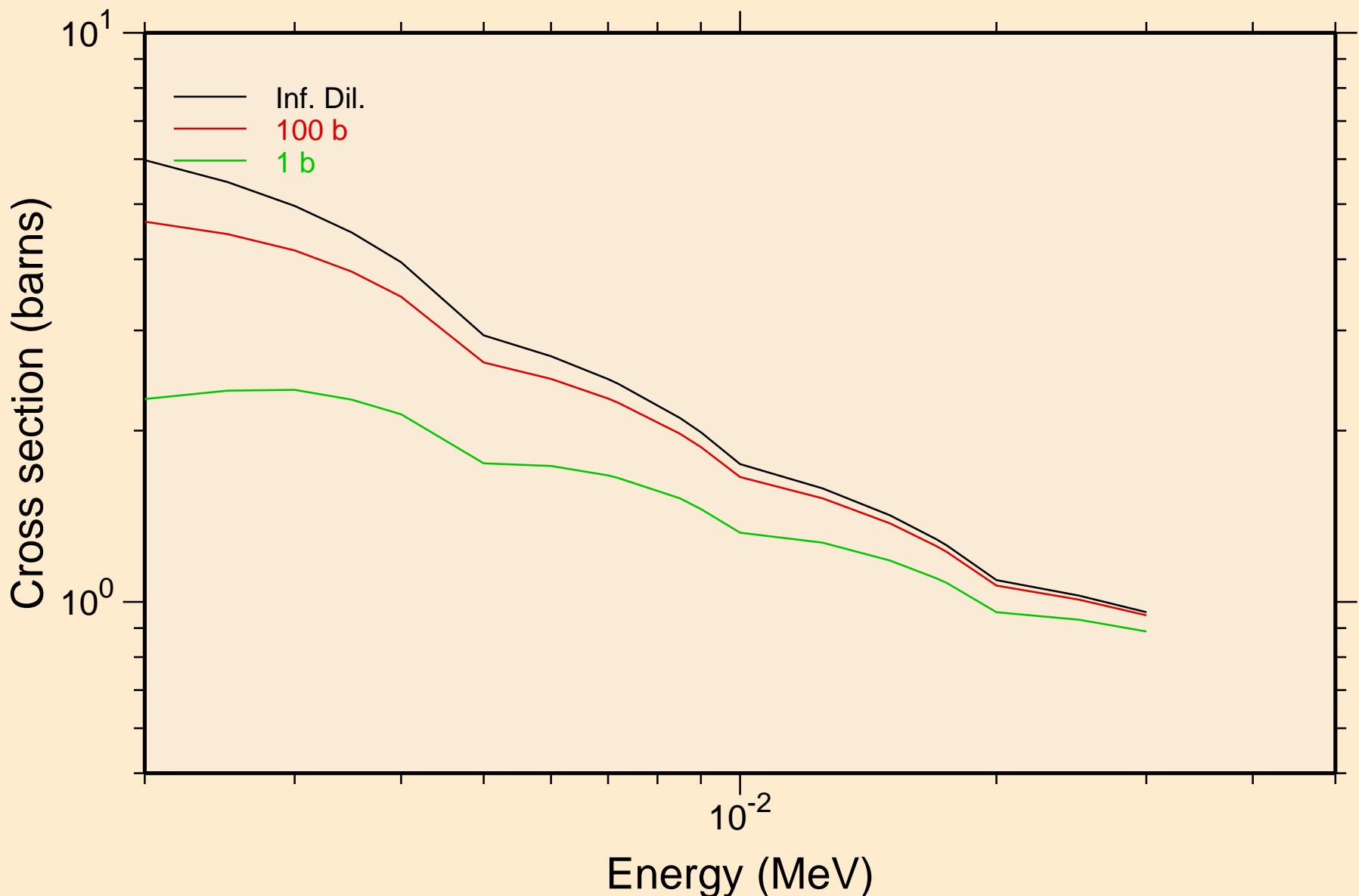
# ADVANCE CALCULATIONS

## UR elastic cross section



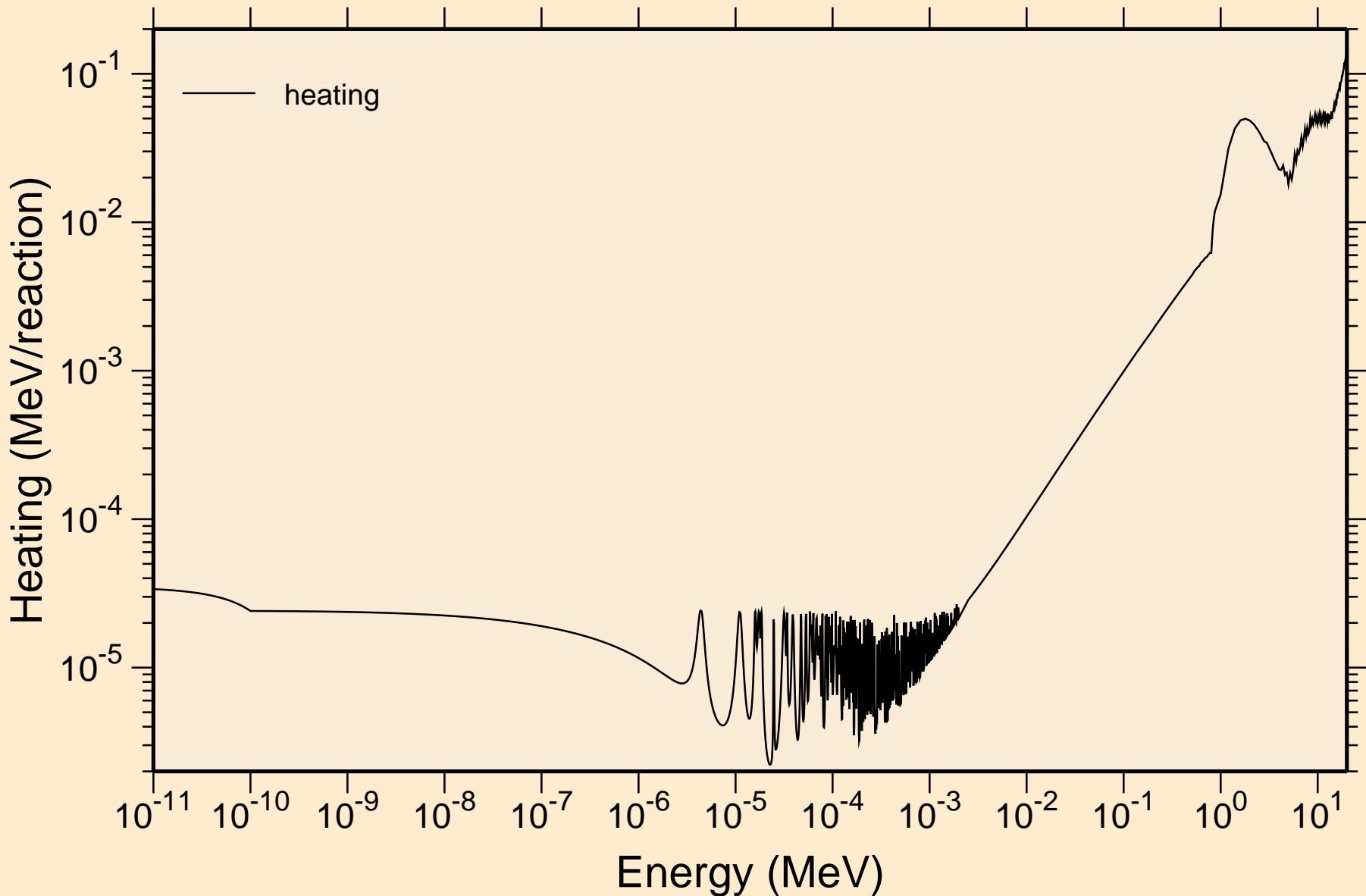
# ADVANCE CALCULATIONS

## UR capture cross section



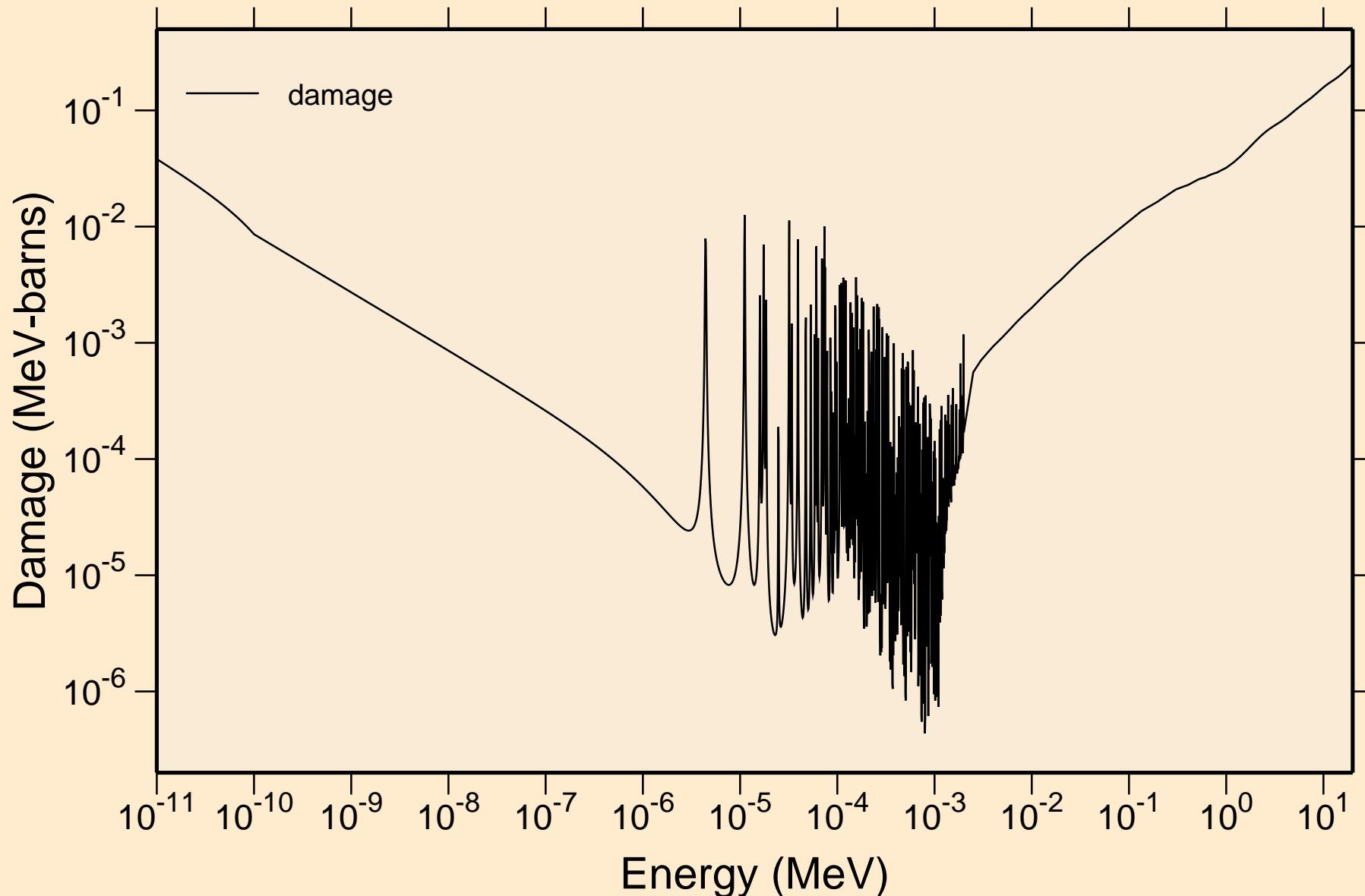
# ADVANCE CALCULATIONS

## Heating



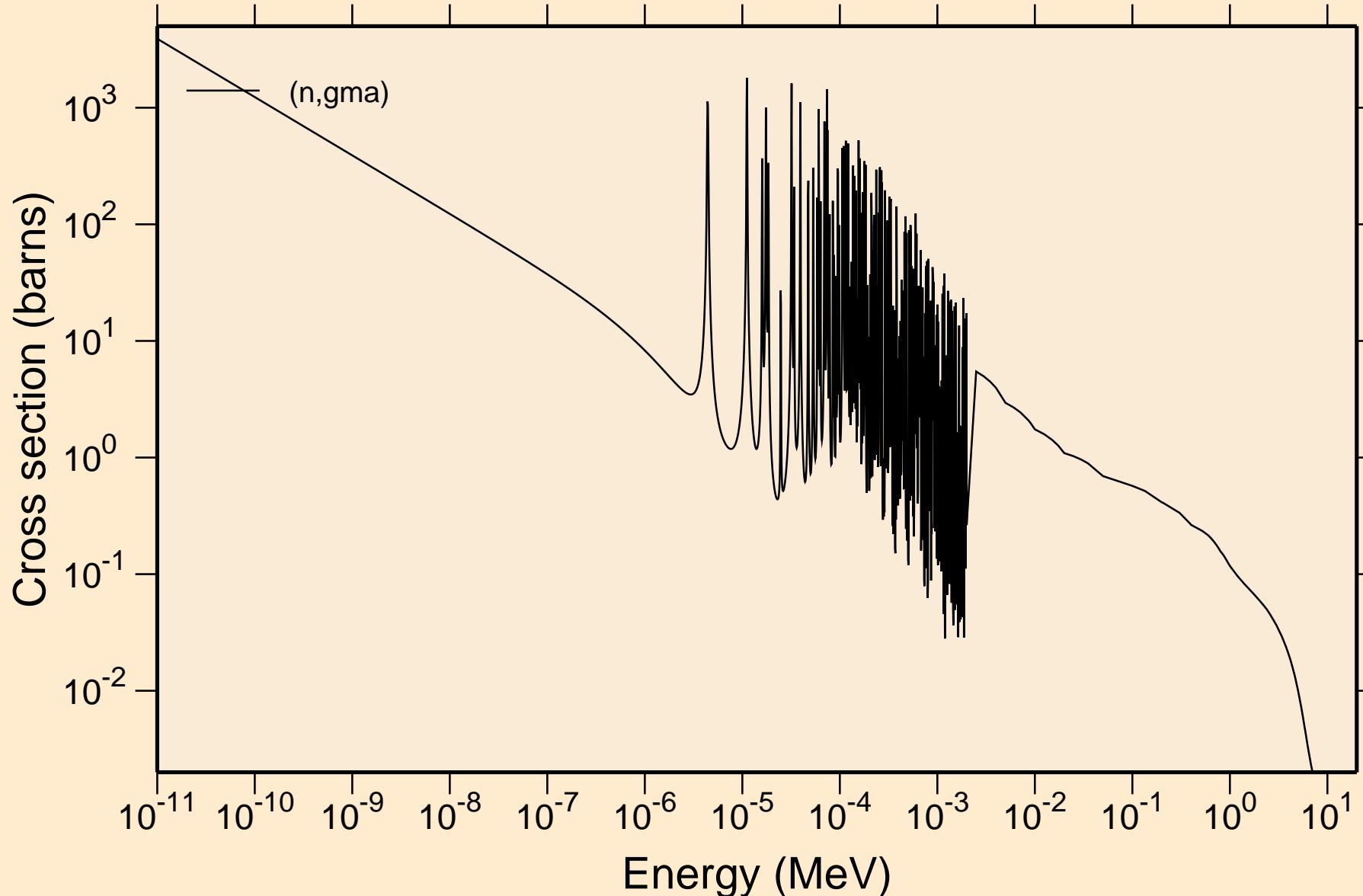
# ADVANCE CALCULATIONS

## Damage



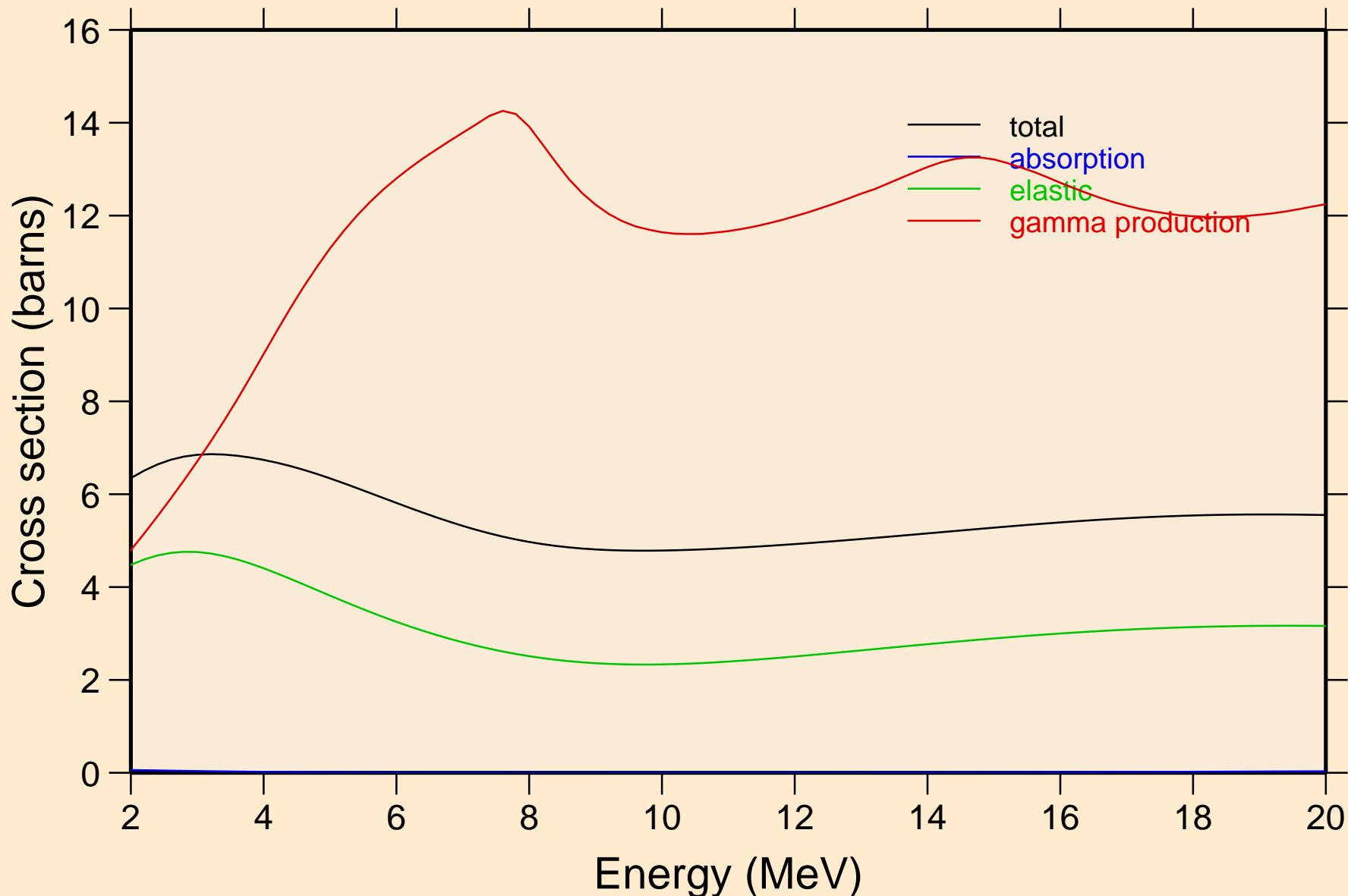
# ADVANCE CALCULATIONS

## Non-threshold reactions



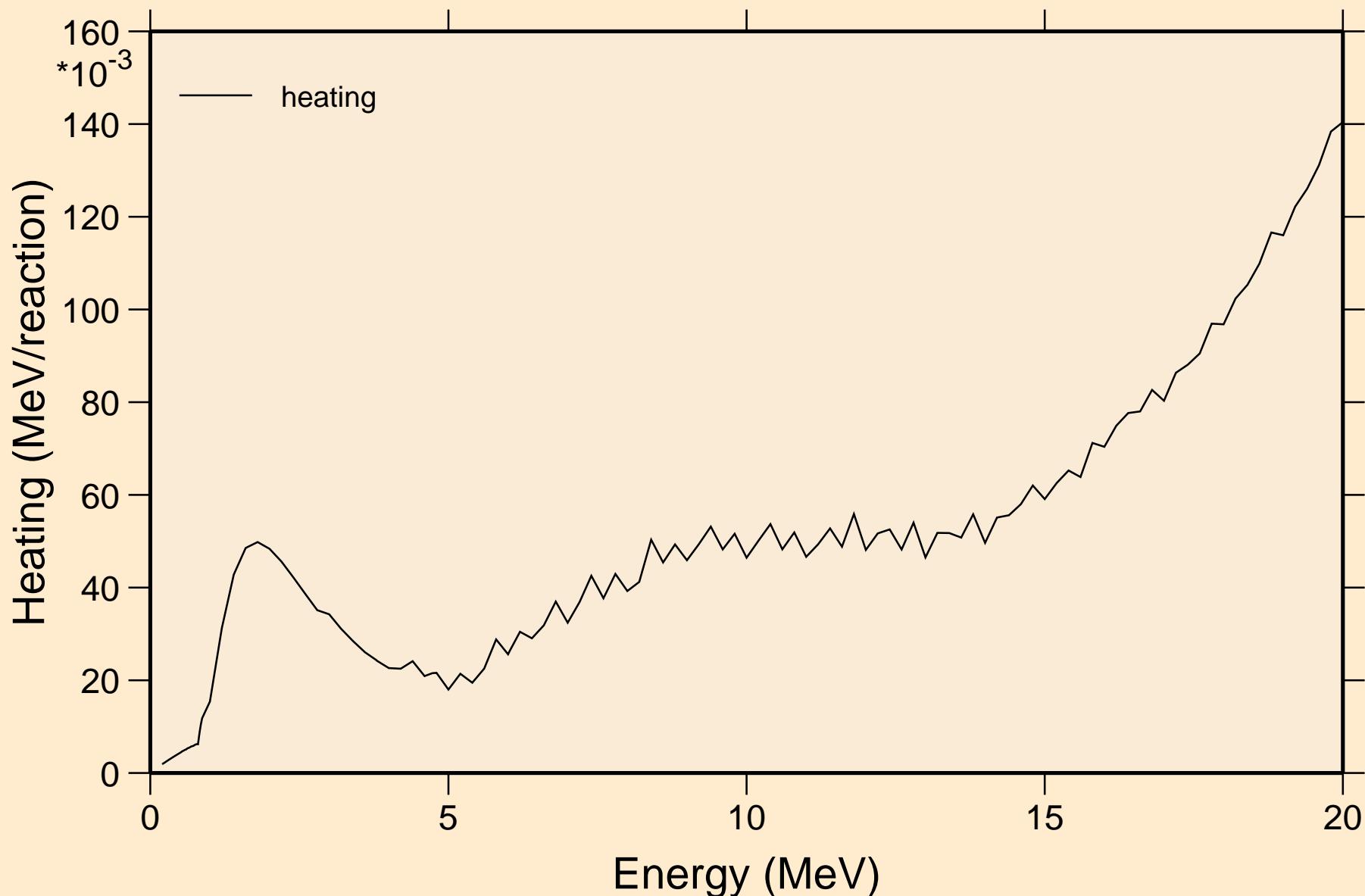
# ADVANCE CALCULATIONS

## Principal cross sections



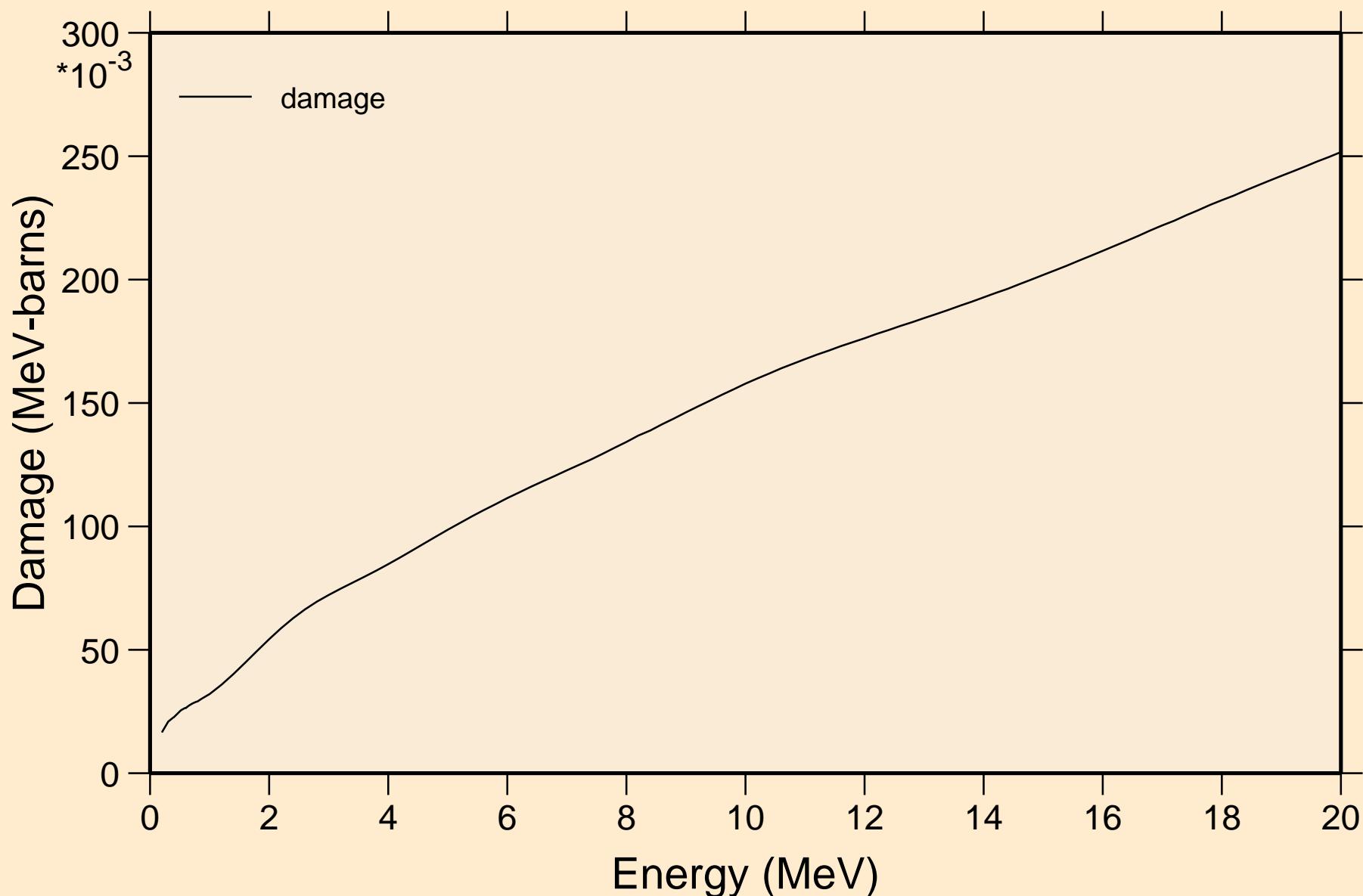
# ADVANCE CALCULATIONS

## Heating



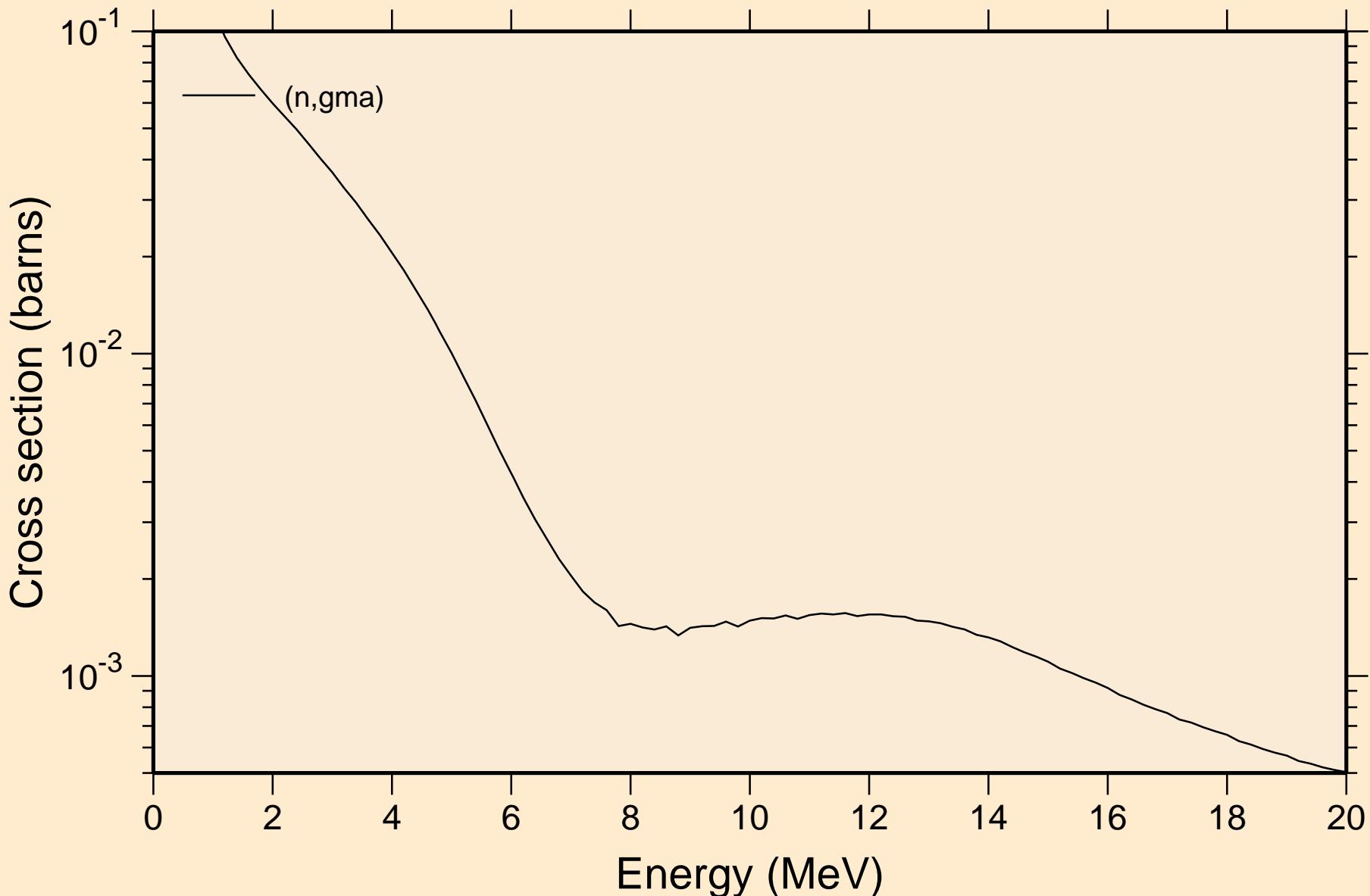
# ADVANCE CALCULATIONS

## Damage



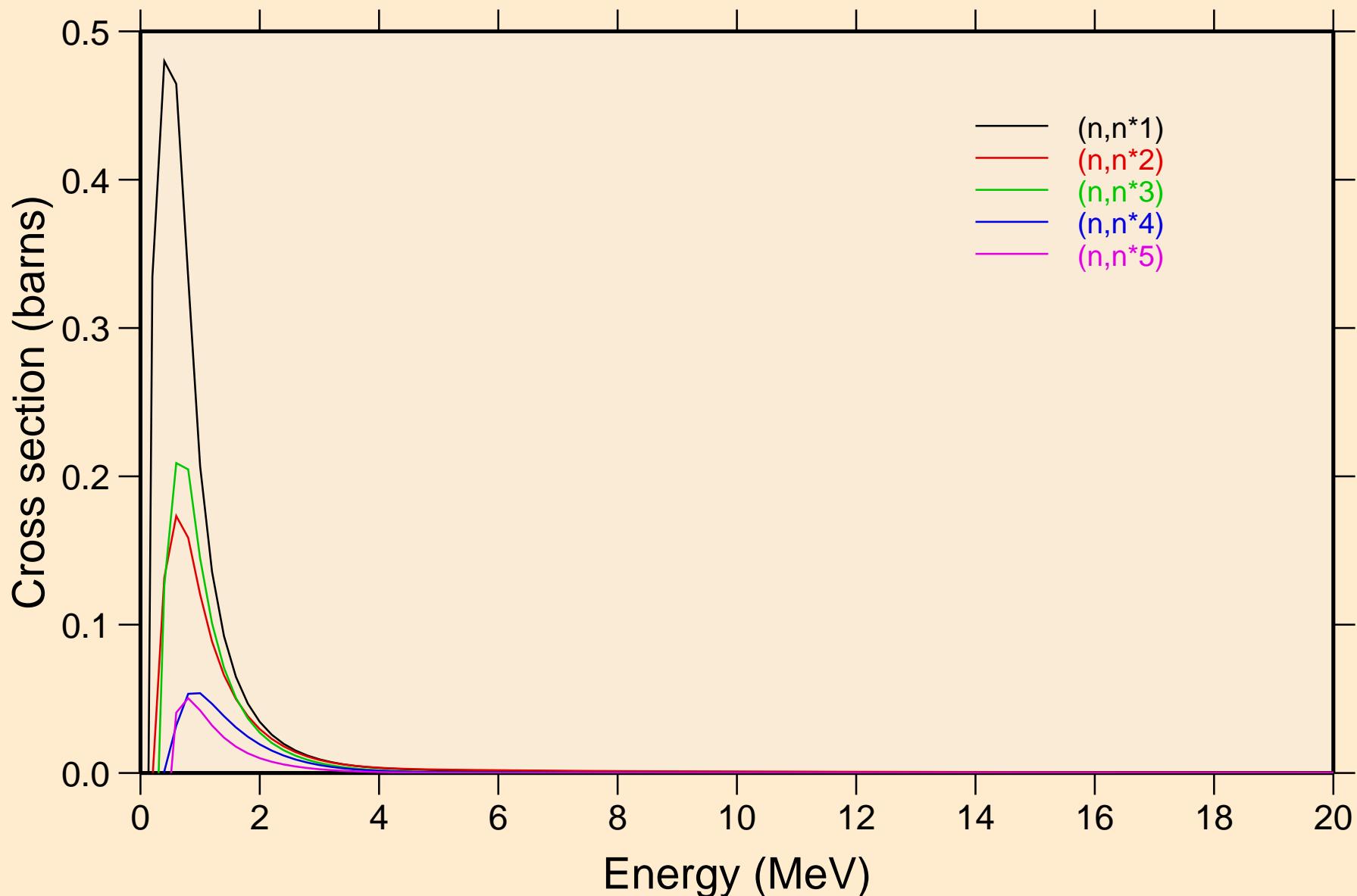
# ADVANCE CALCULATIONS

## Non-threshold reactions



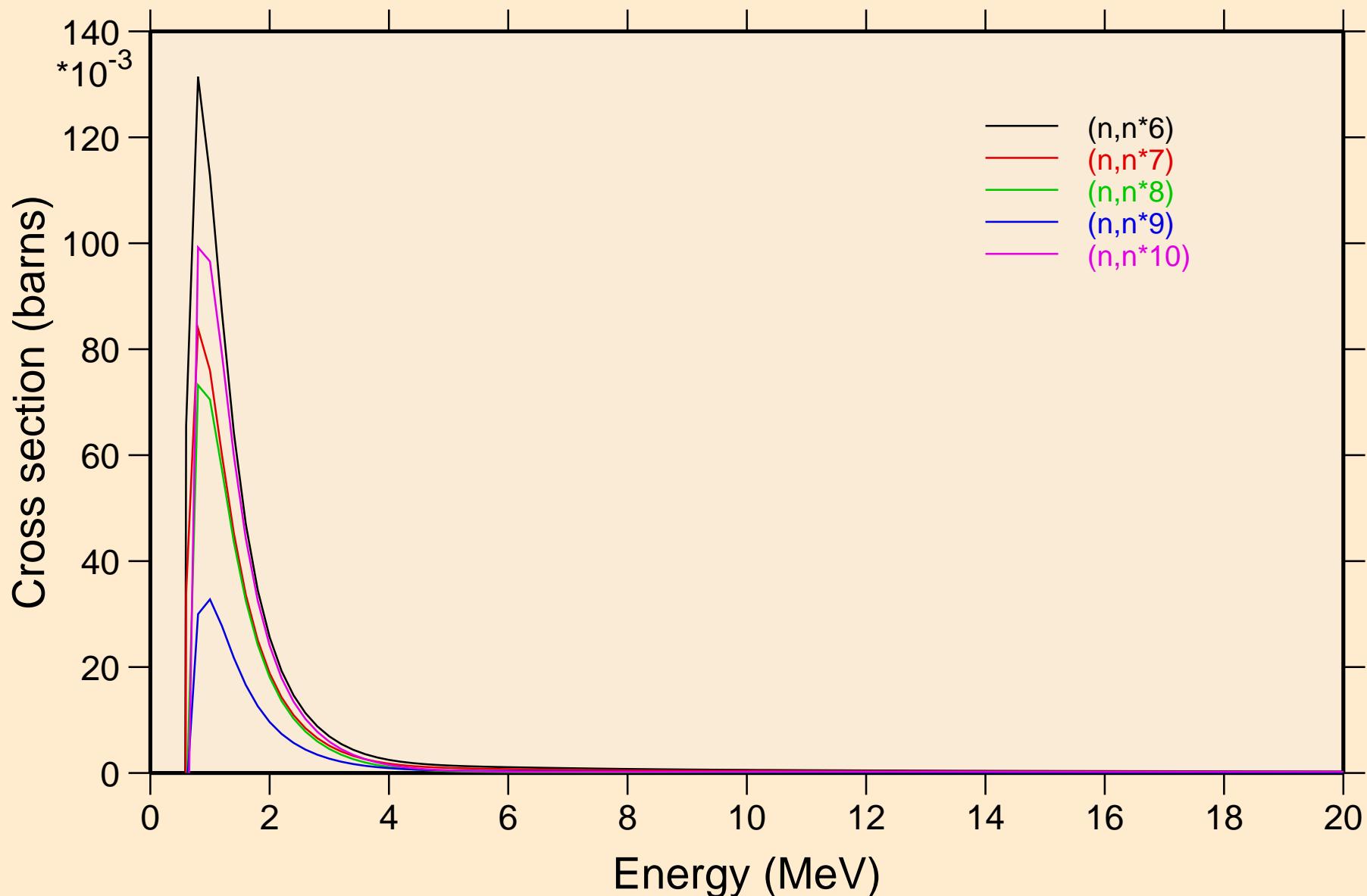
# ADVANCE CALCULATIONS

## Inelastic levels



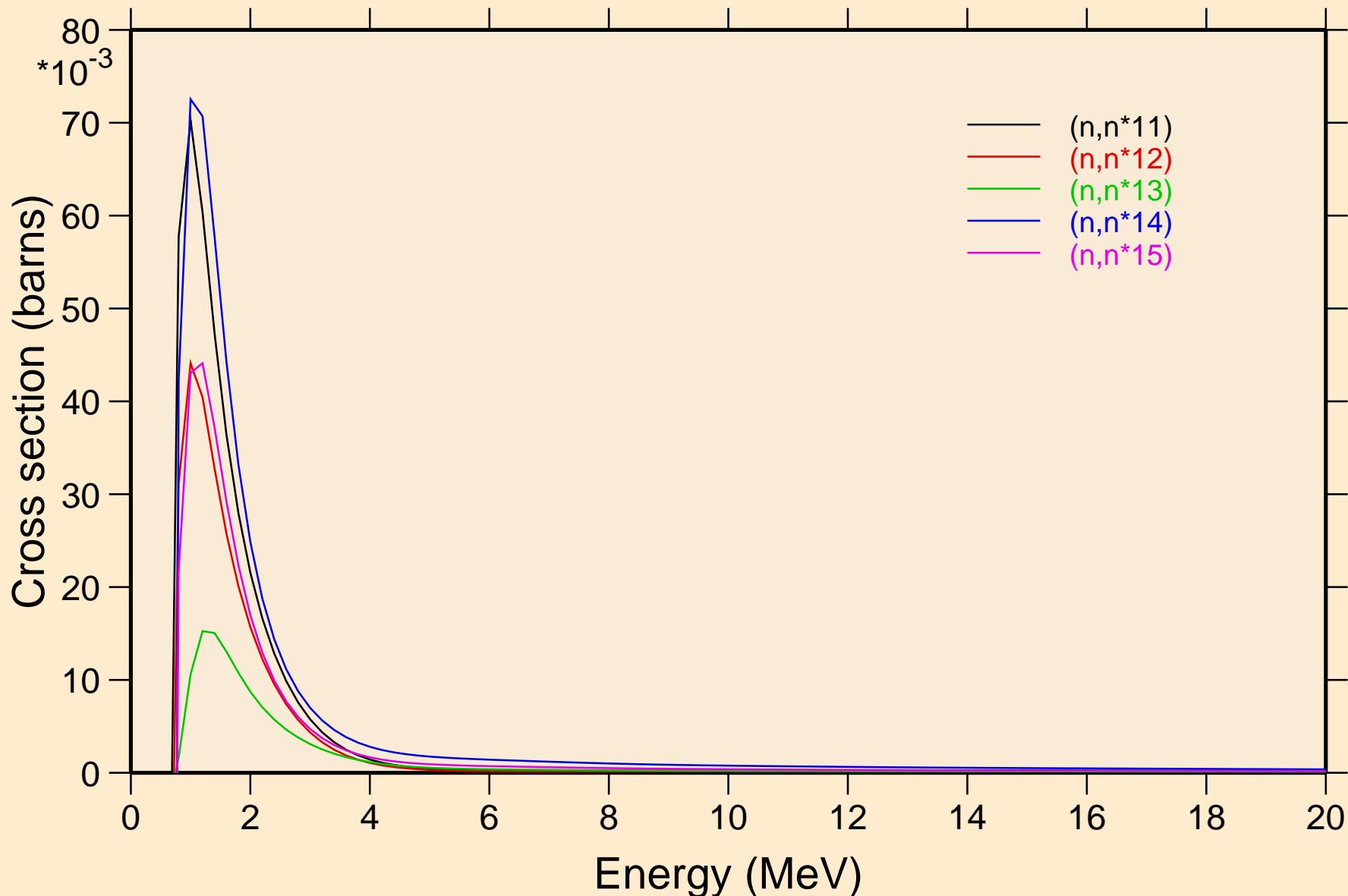
# ADVANCE CALCULATIONS

## Inelastic levels



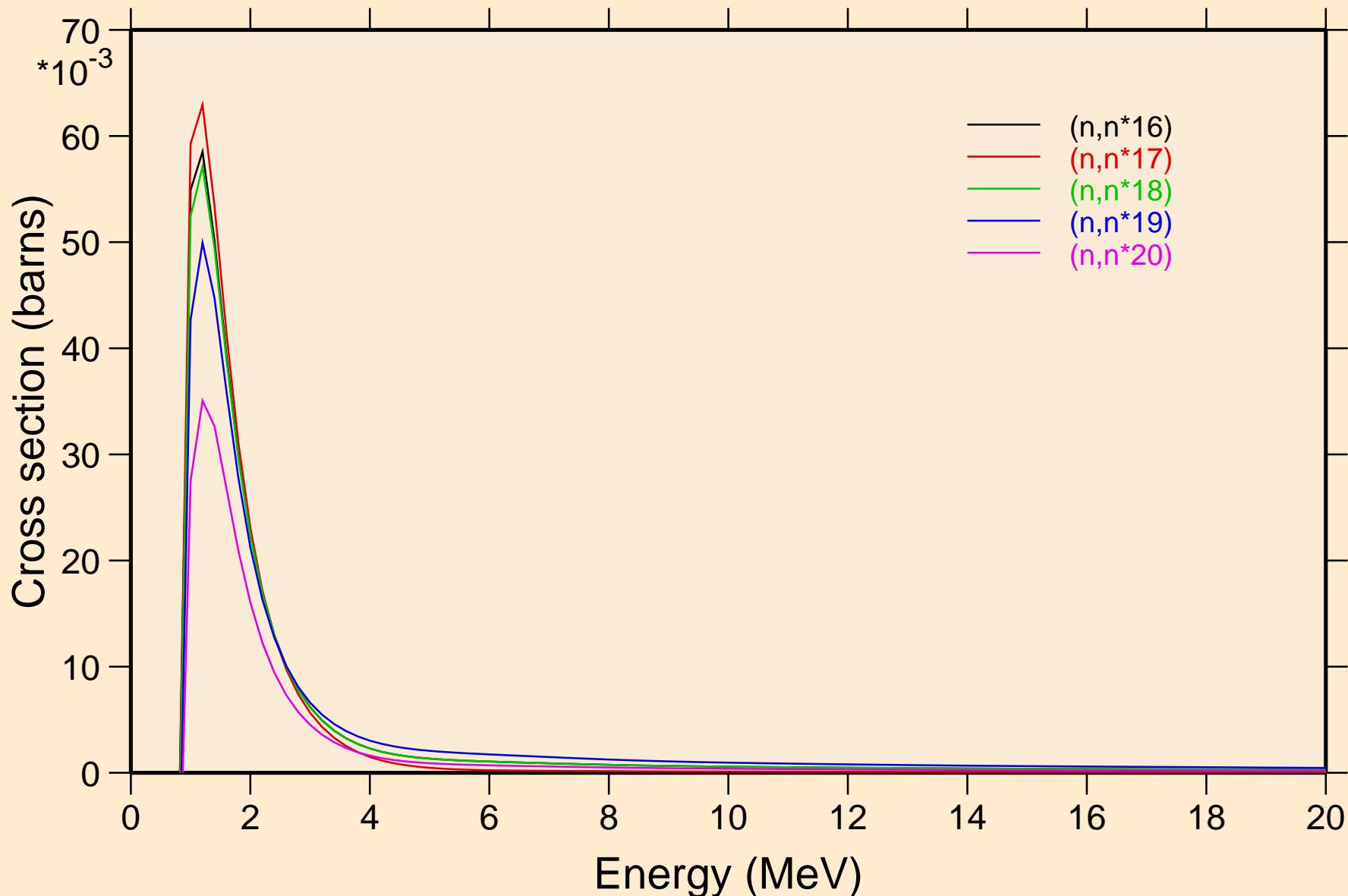
# ADVANCE CALCULATIONS

## Inelastic levels



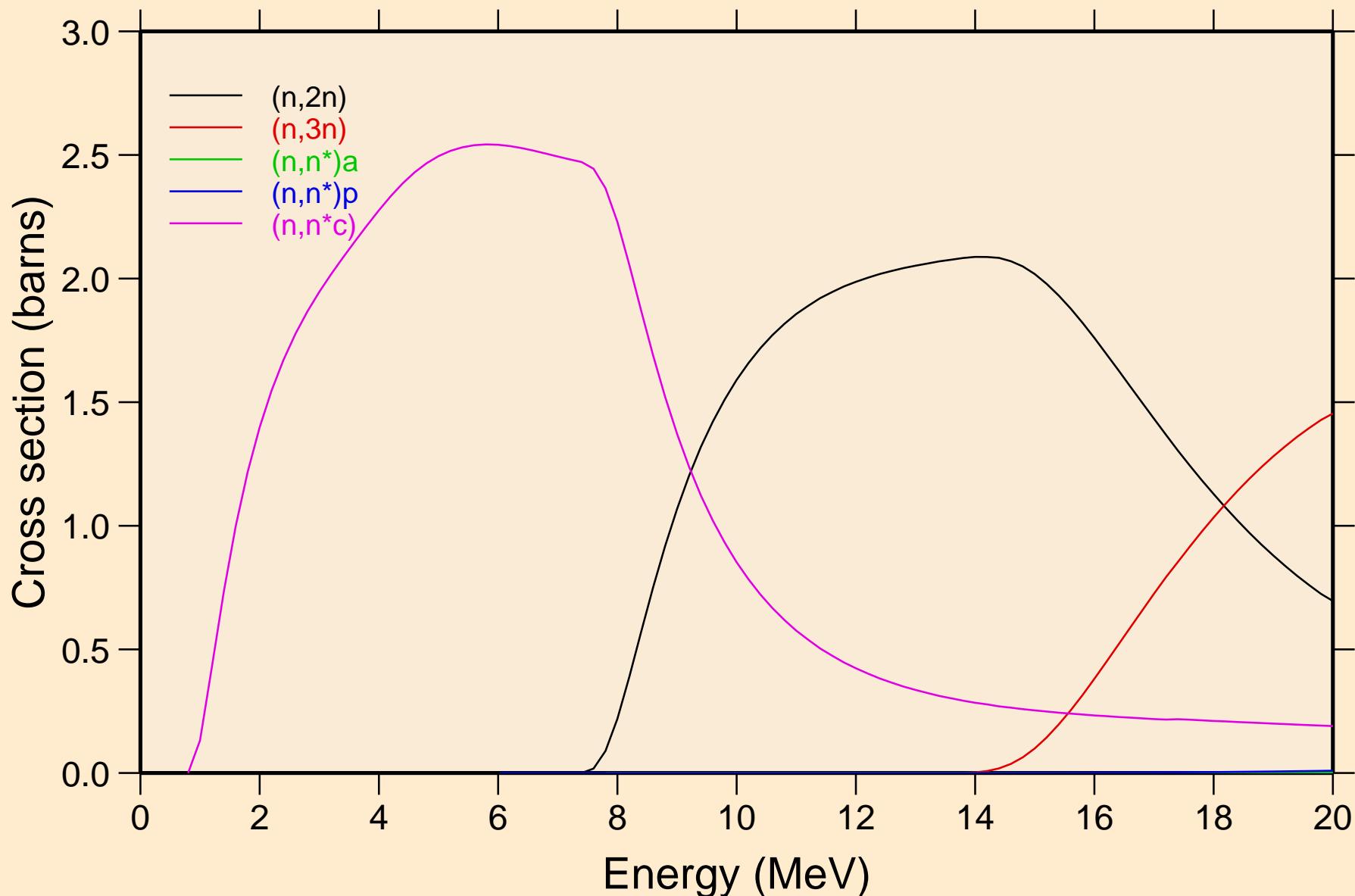
# ADVANCE CALCULATIONS

## Inelastic levels



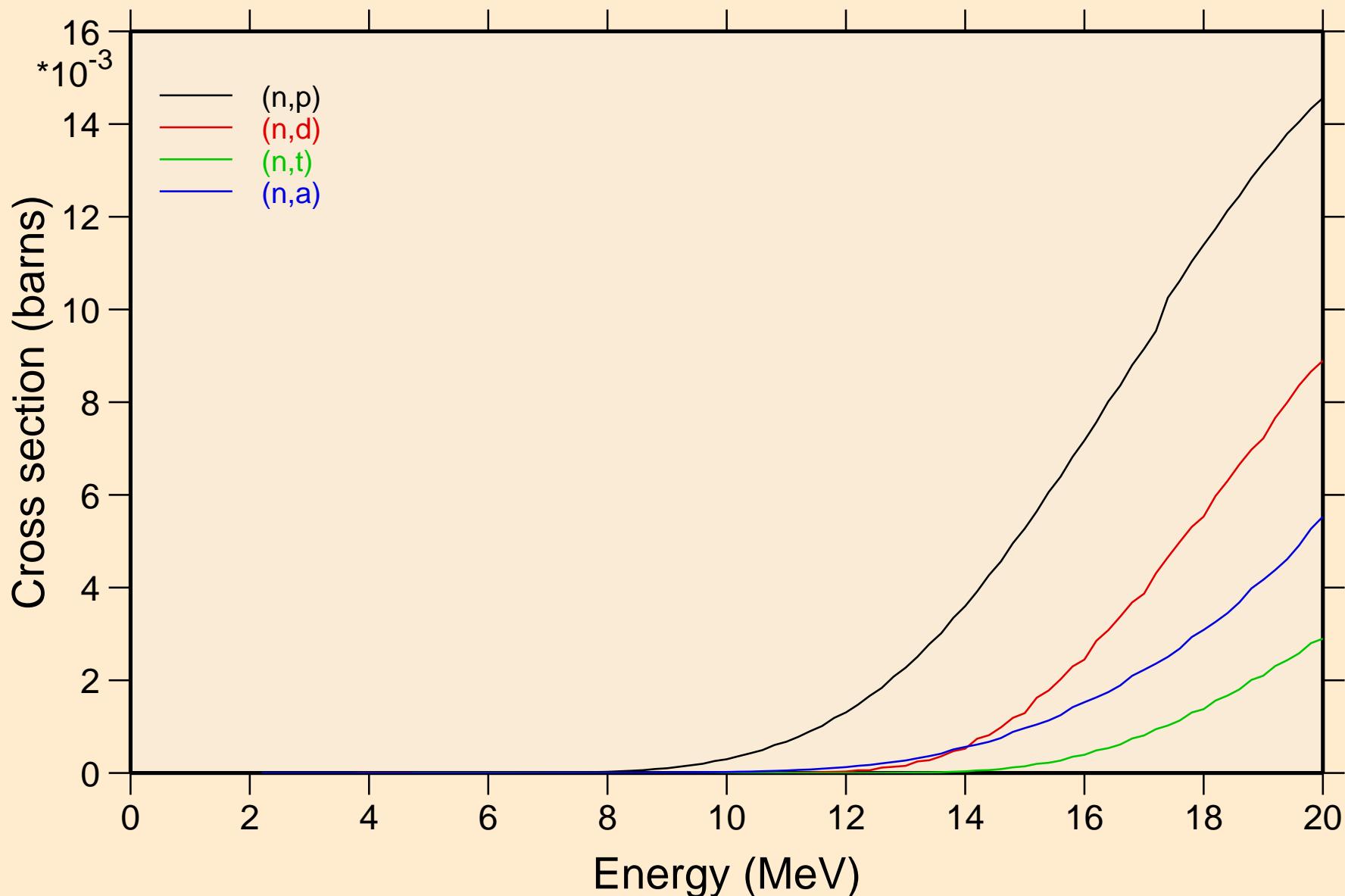
# ADVANCE CALCULATIONS

## Threshold reactions



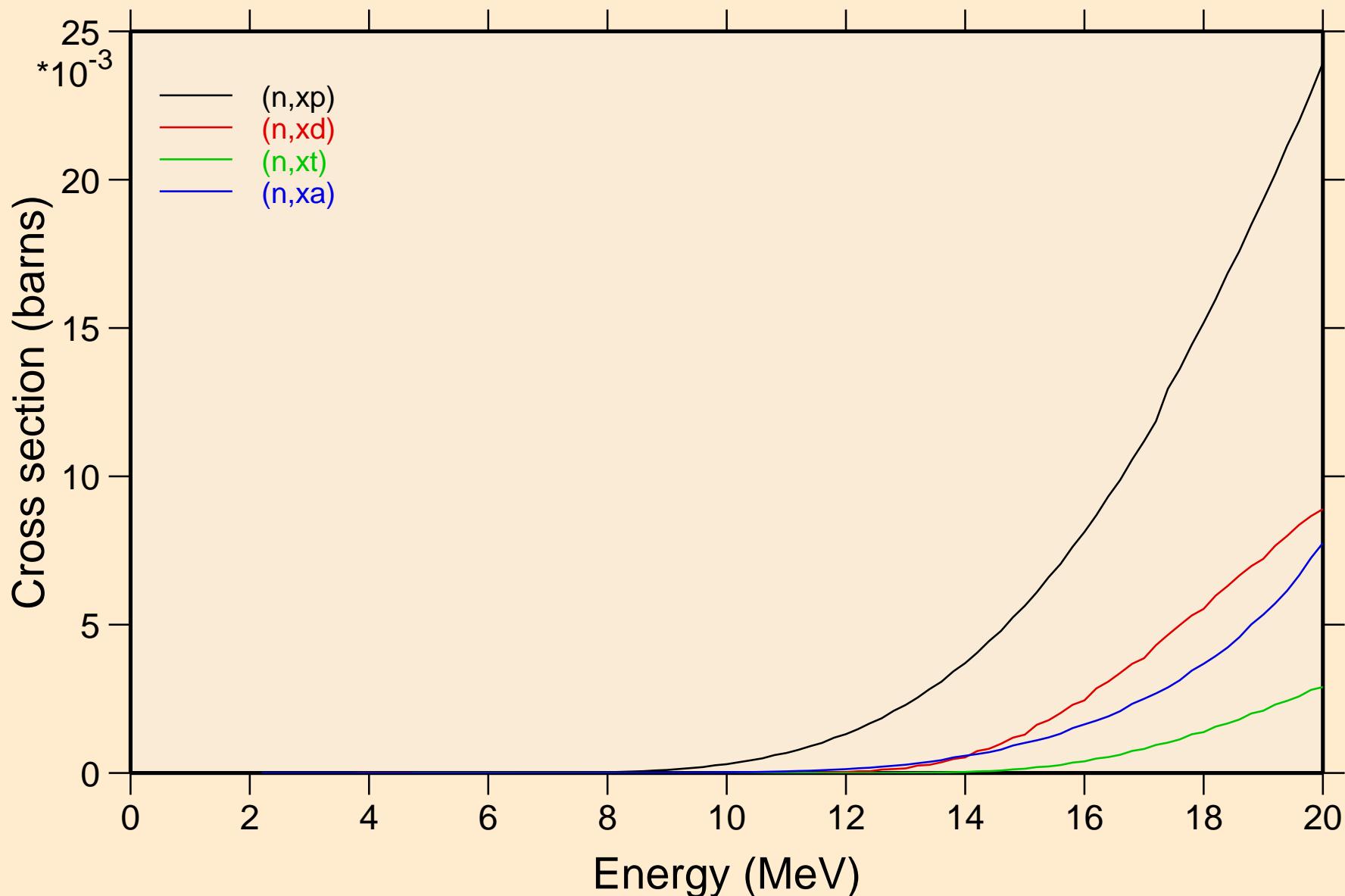
# ADVANCE CALCULATIONS

## Threshold reactions



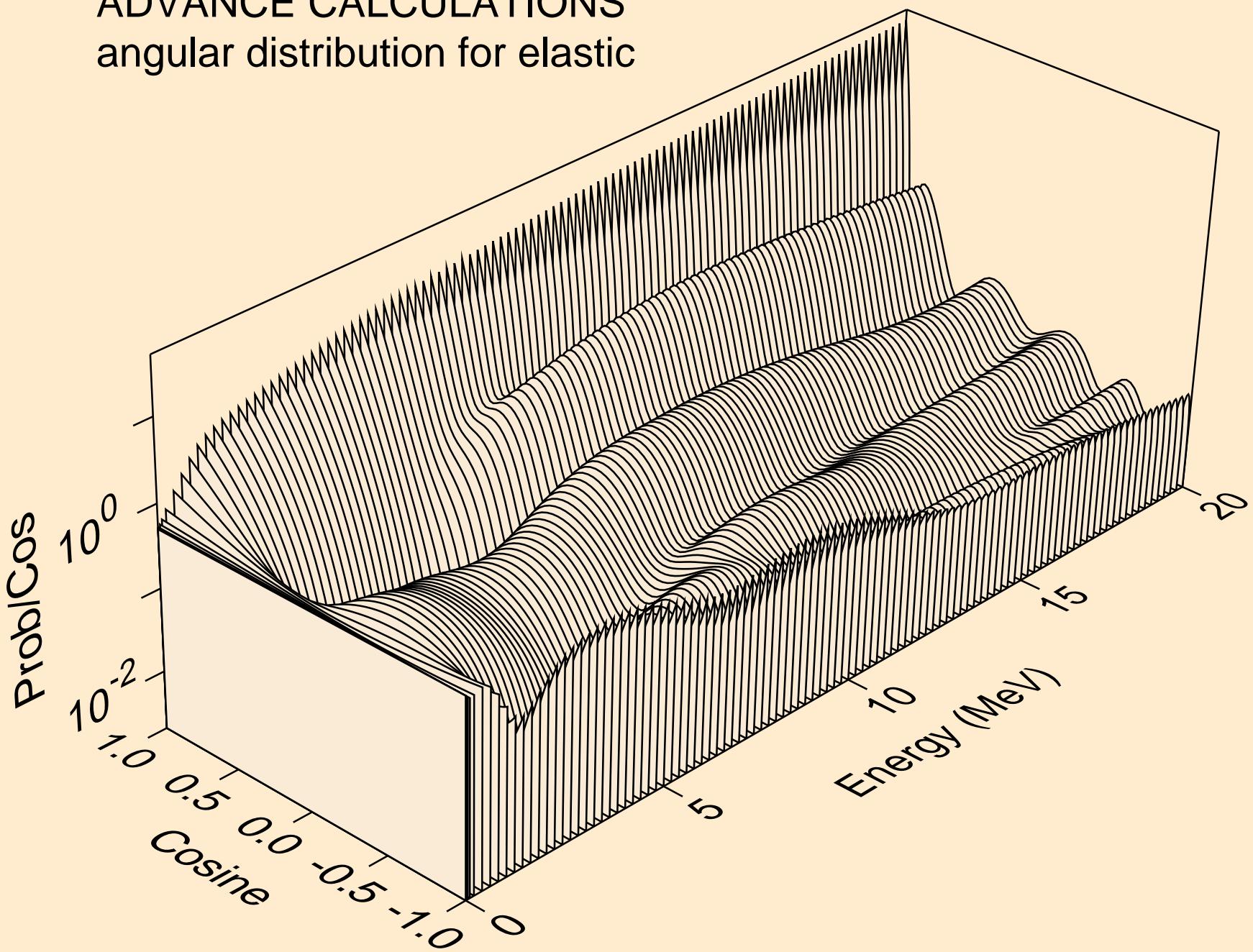
# ADVANCE CALCULATIONS

## Threshold reactions



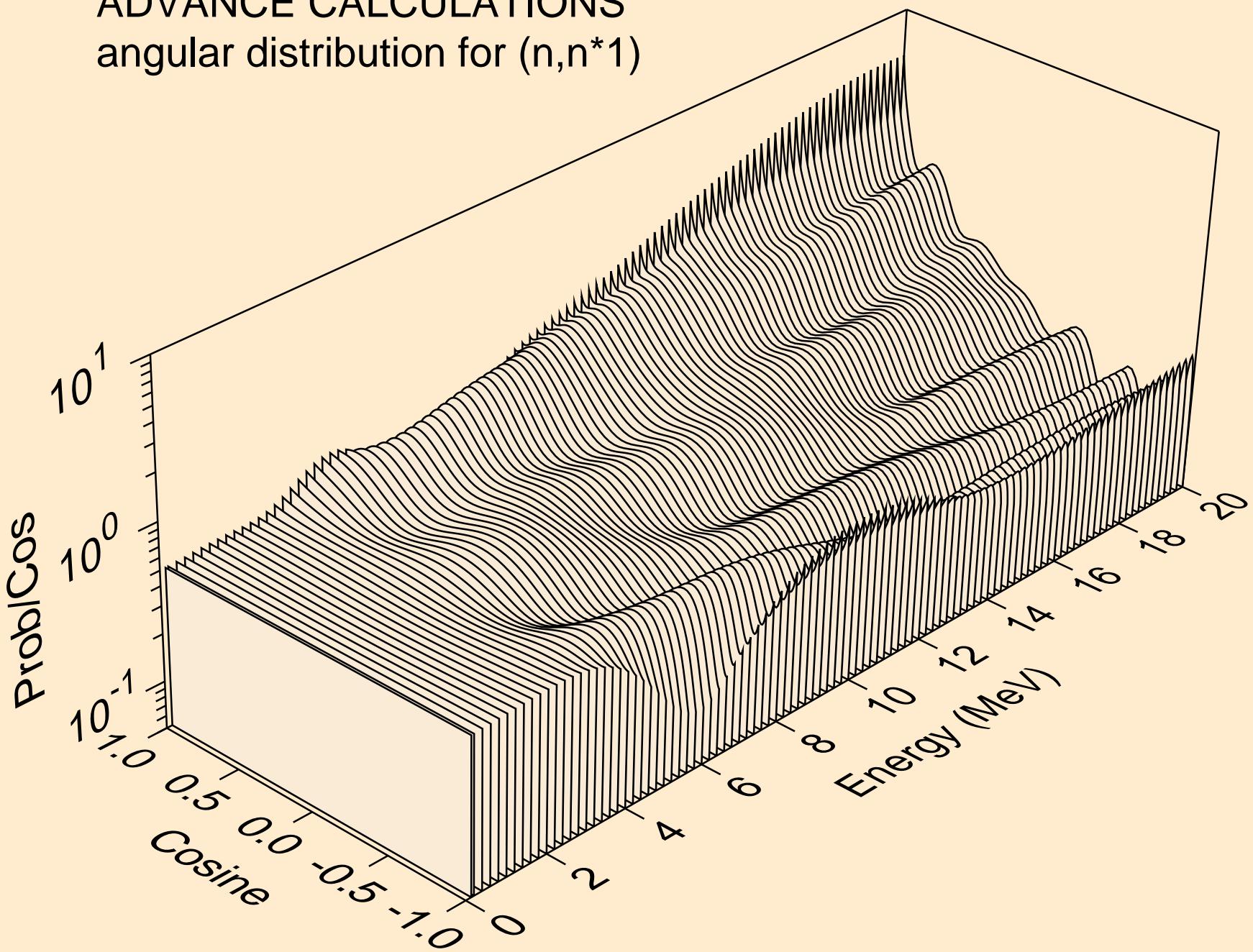
# ADVANCE CALCULATIONS

angular distribution for elastic



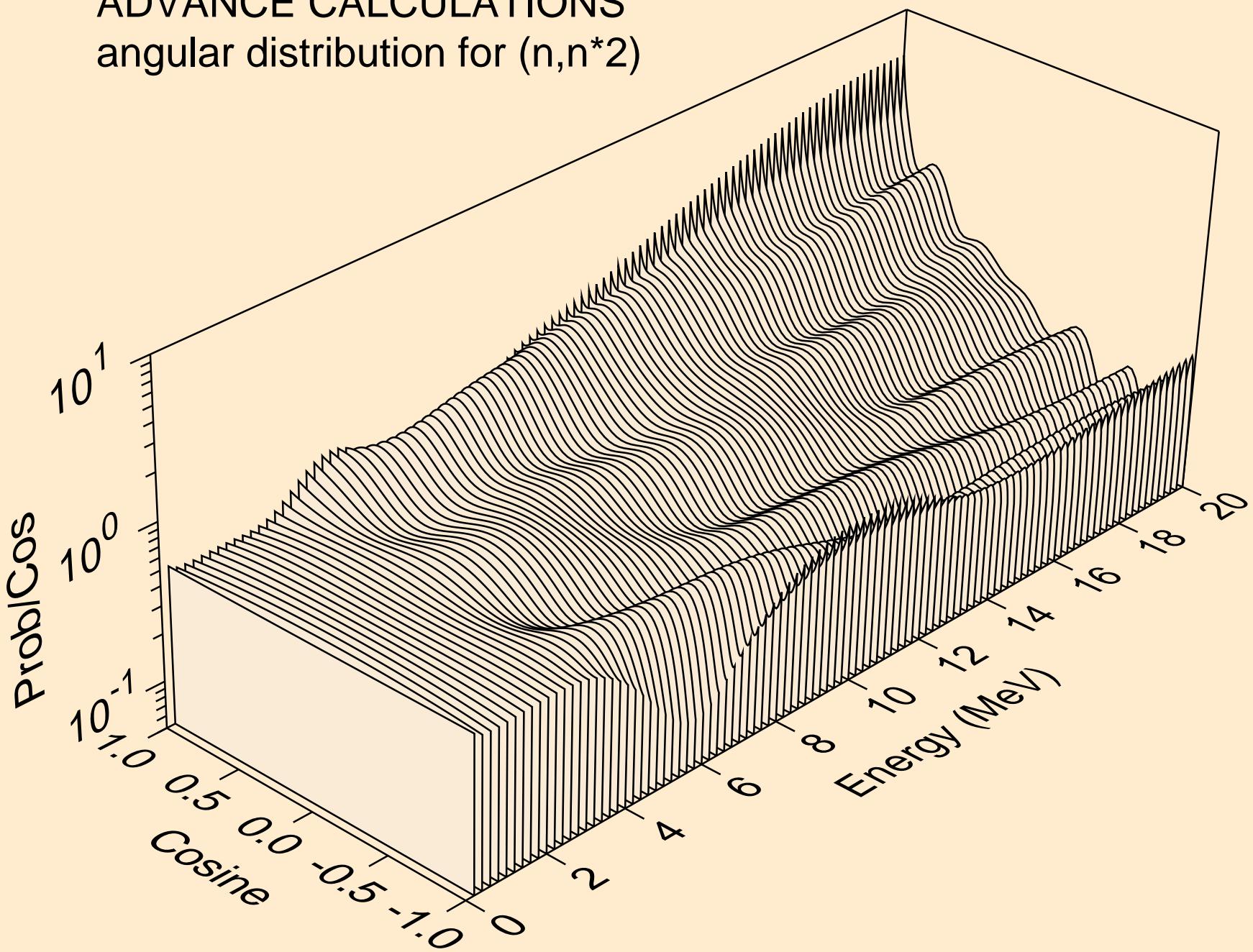
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



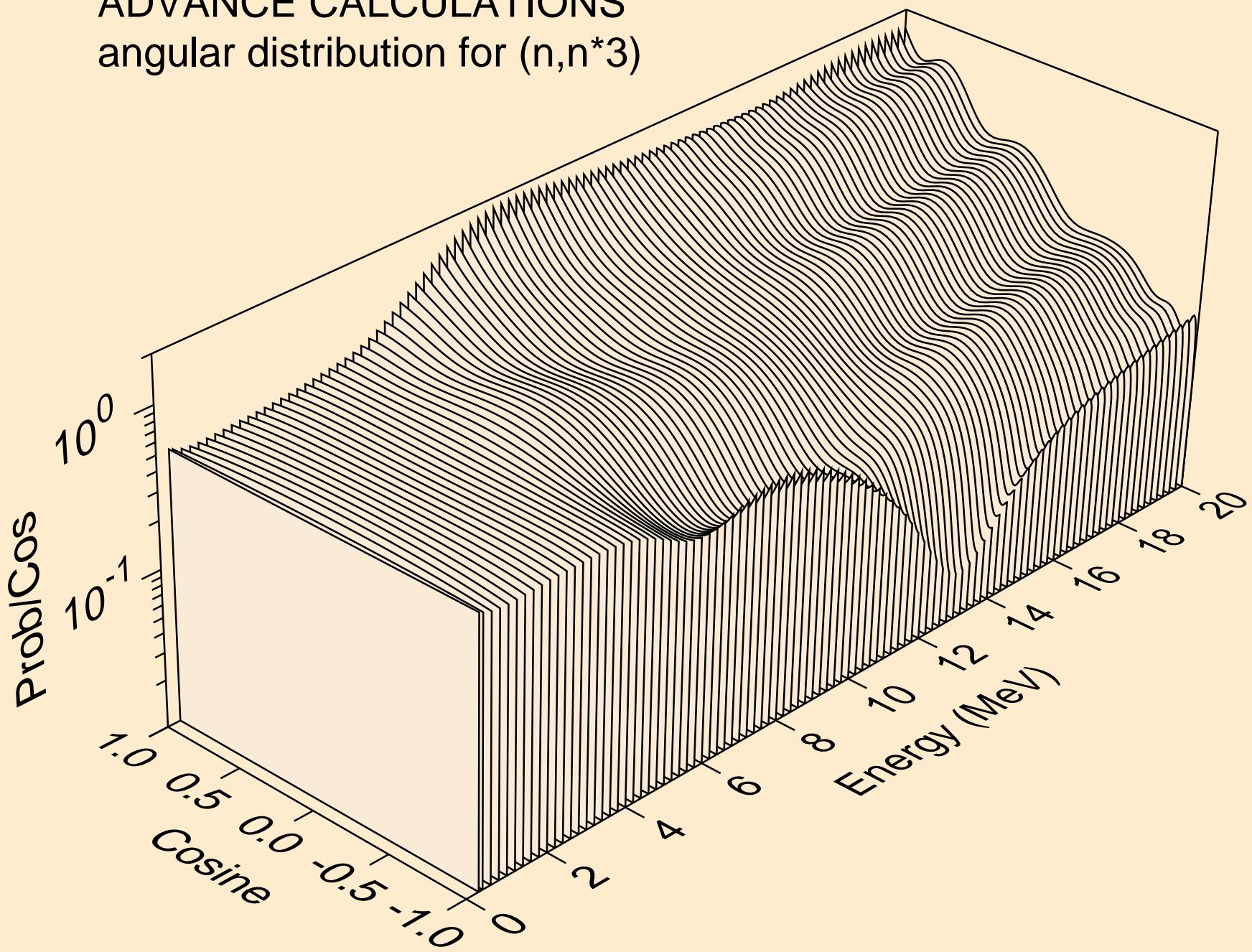
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^2$



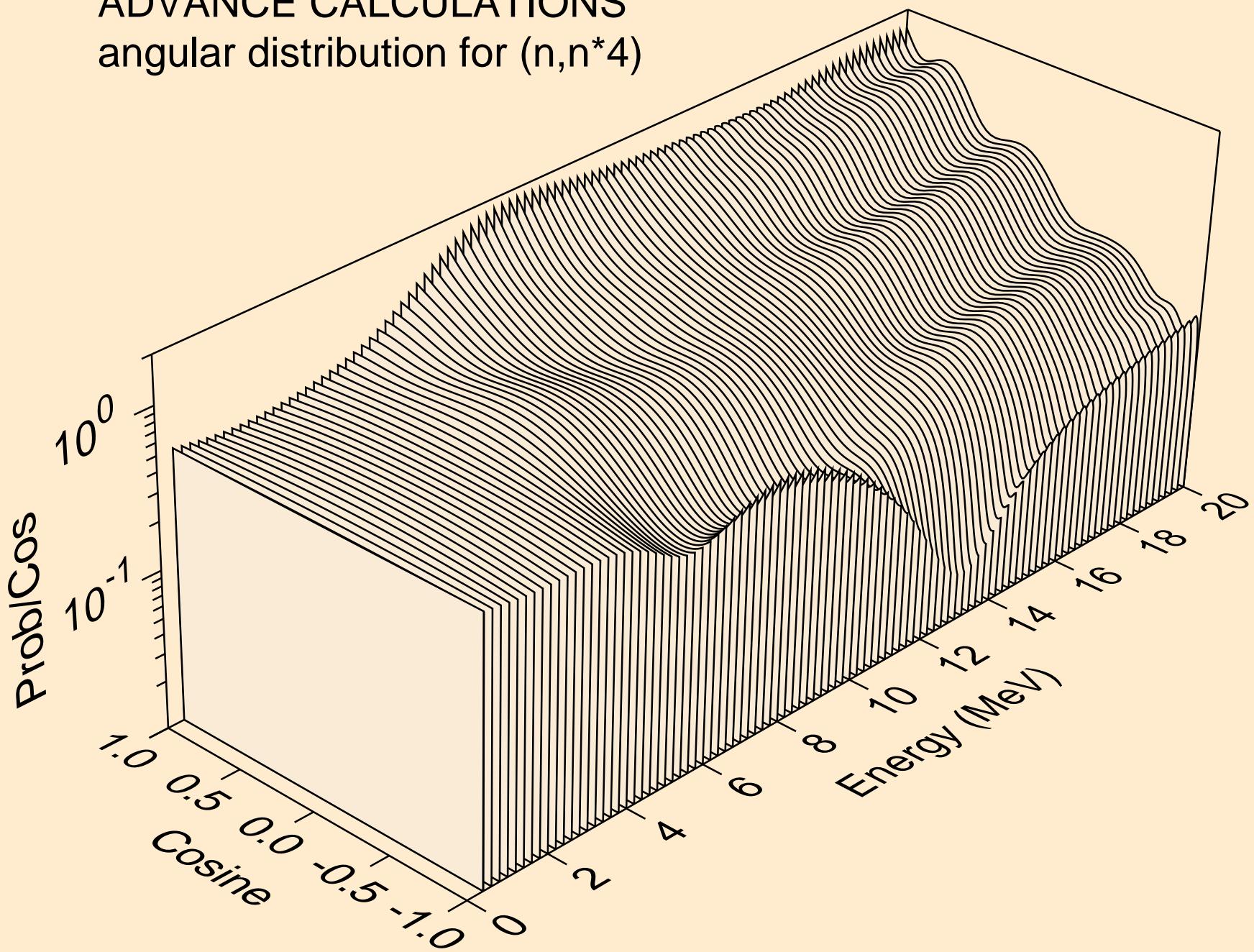
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)^3$



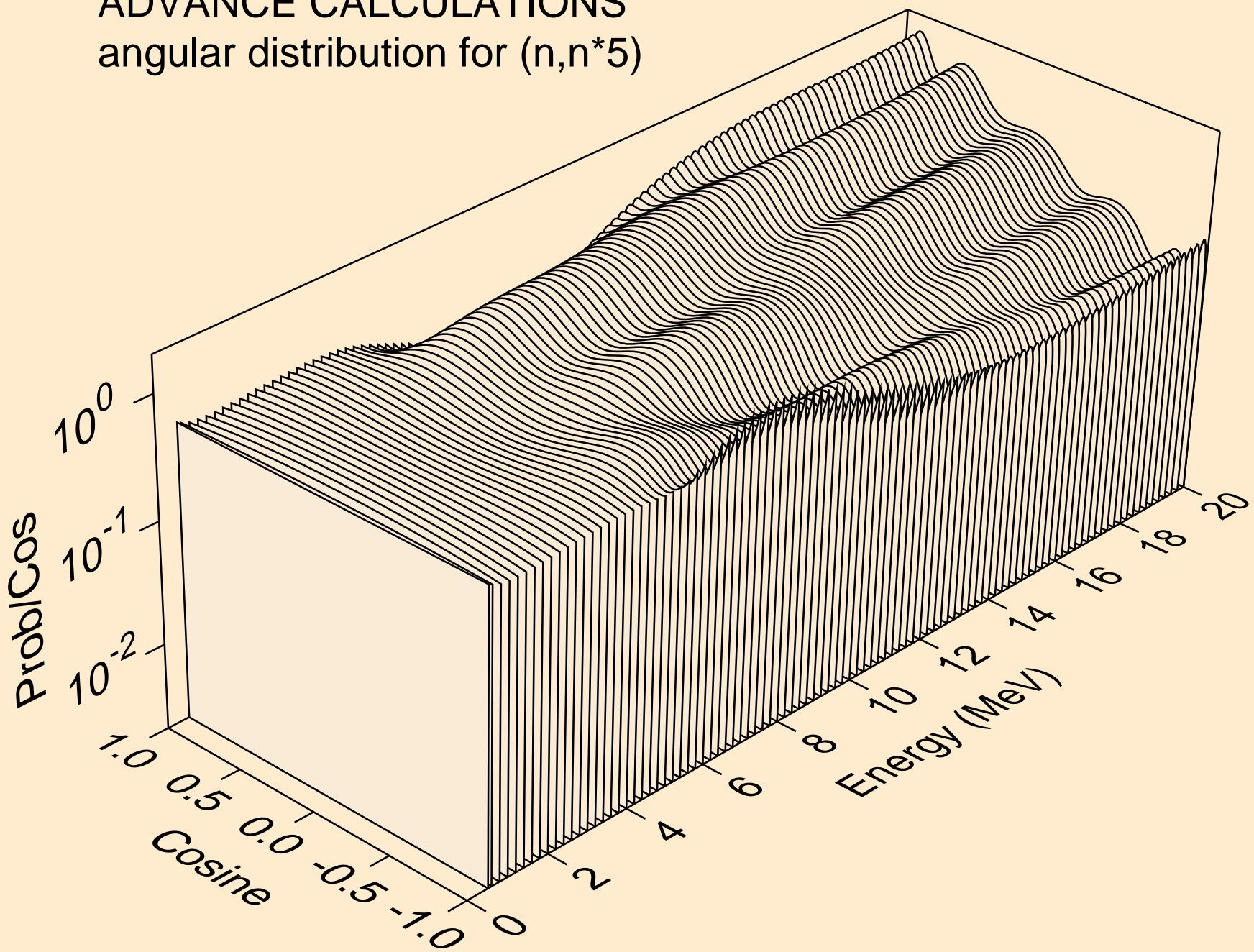
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*4)$



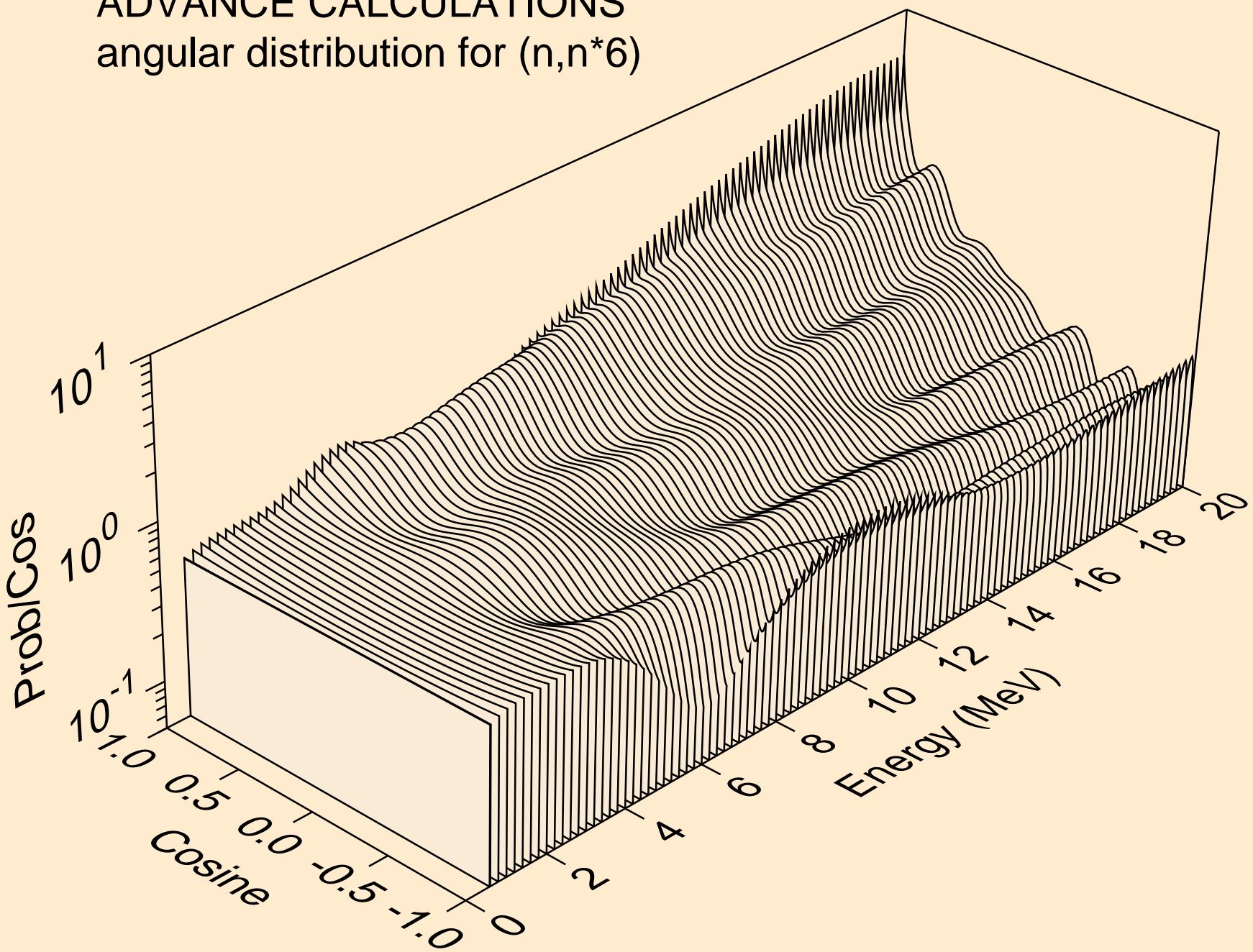
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)$



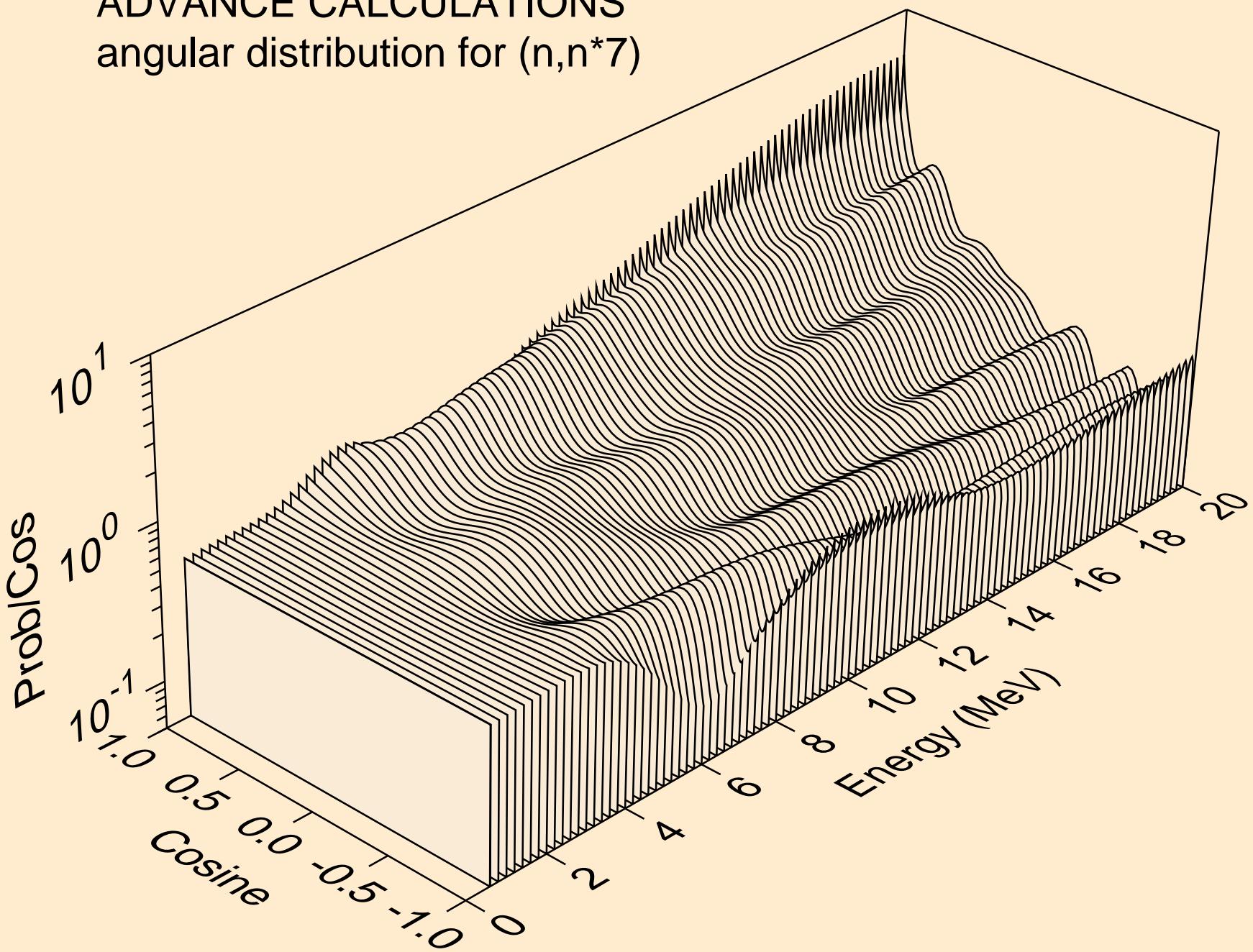
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*6)$



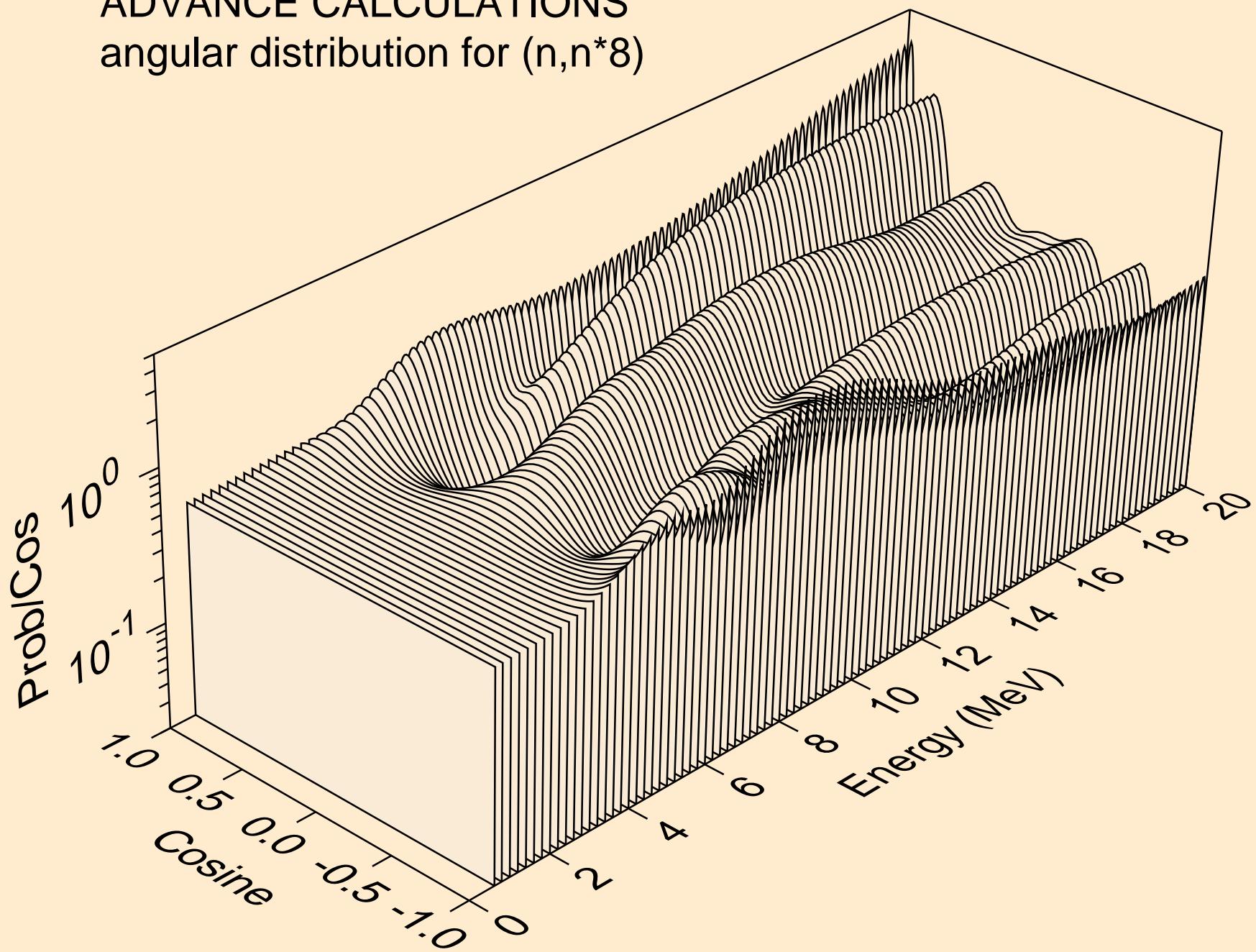
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*7)$



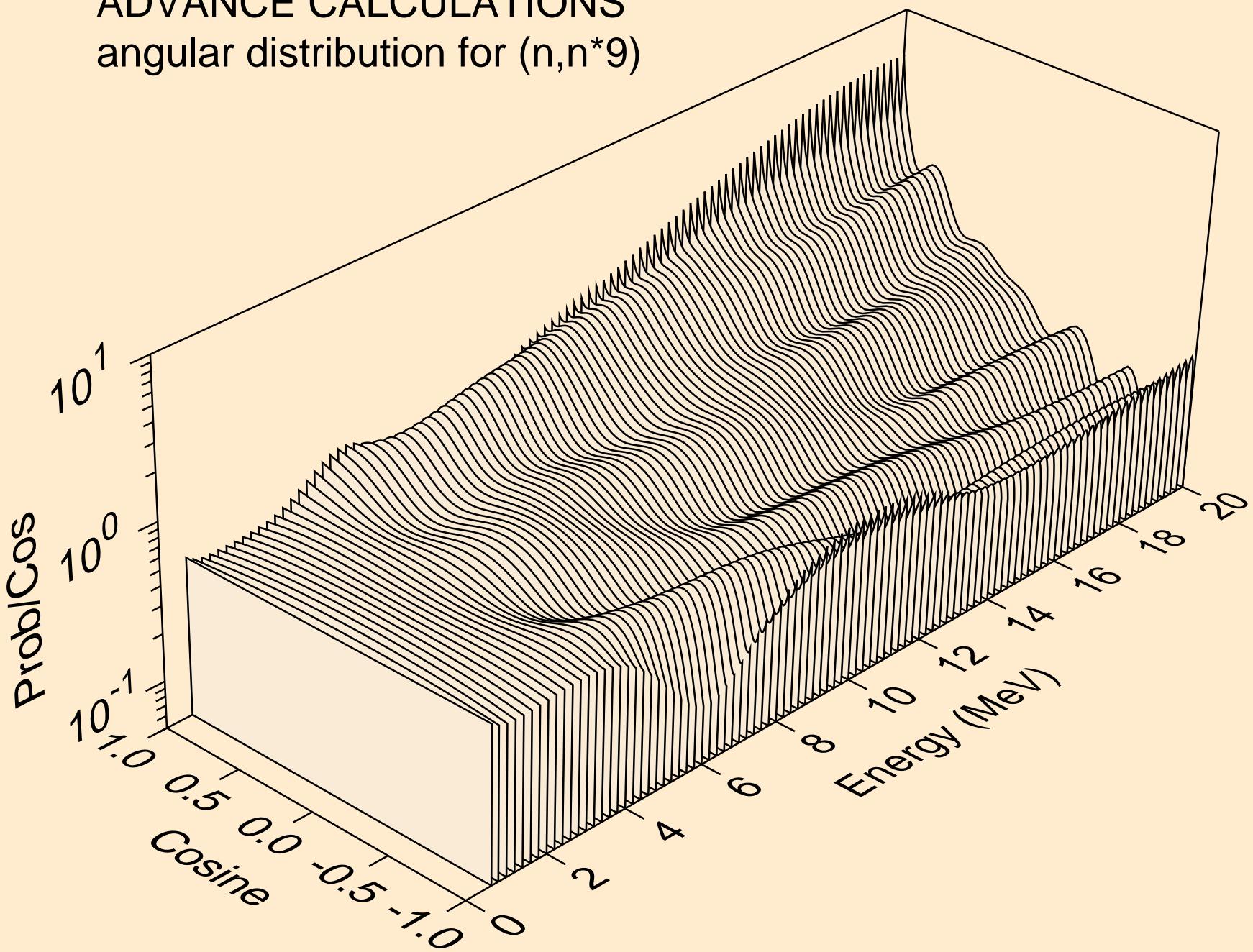
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*8)$



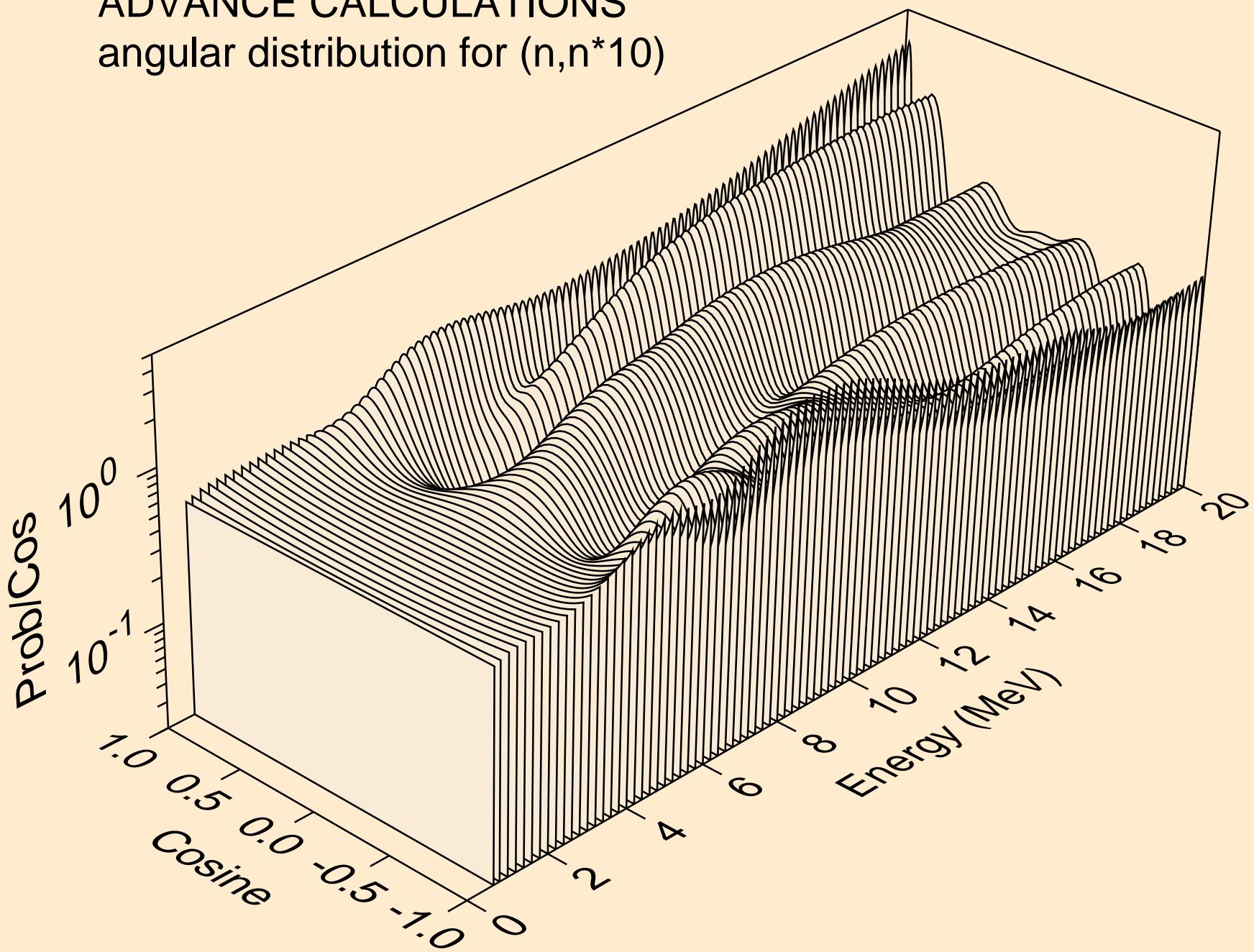
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)9$



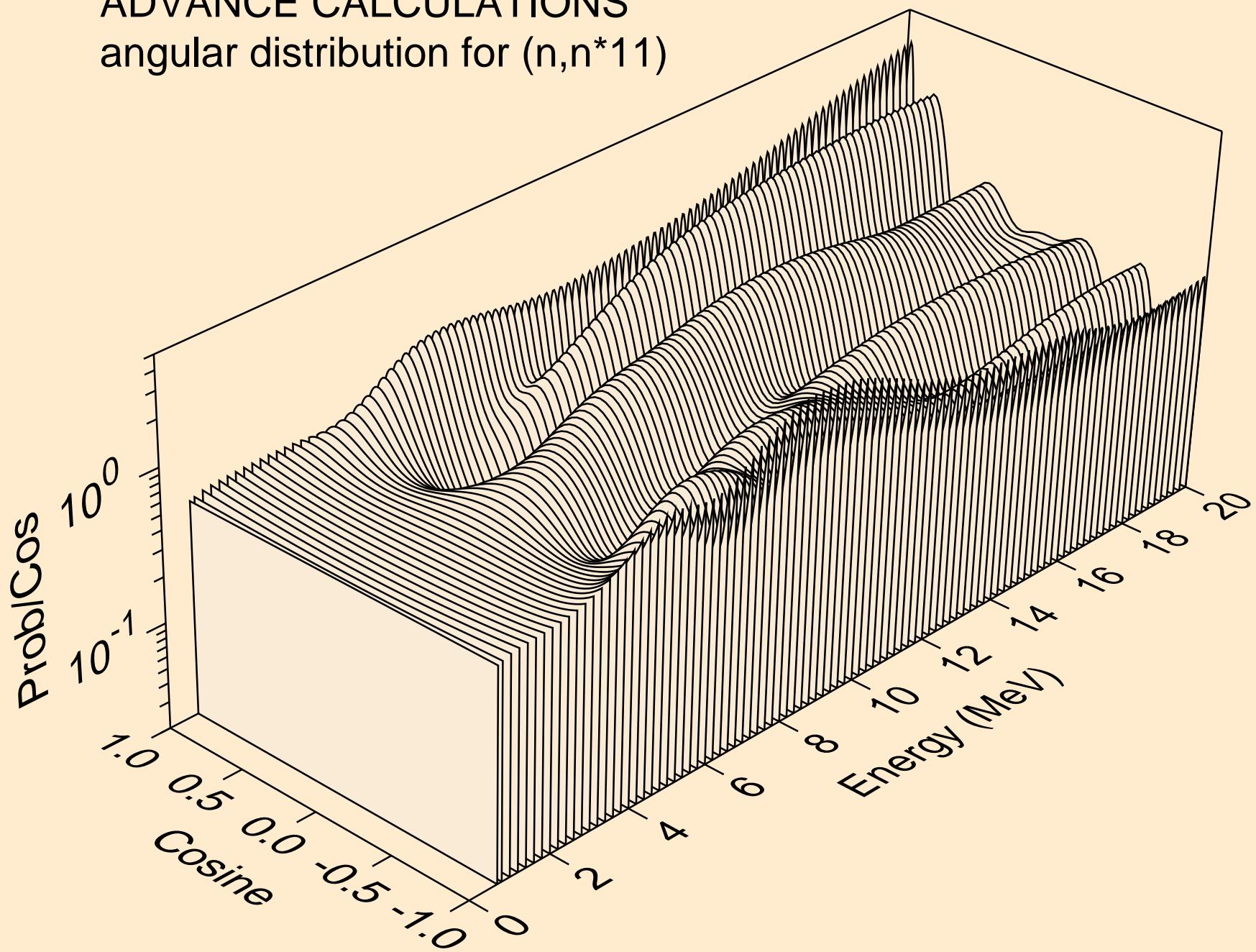
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*10)$



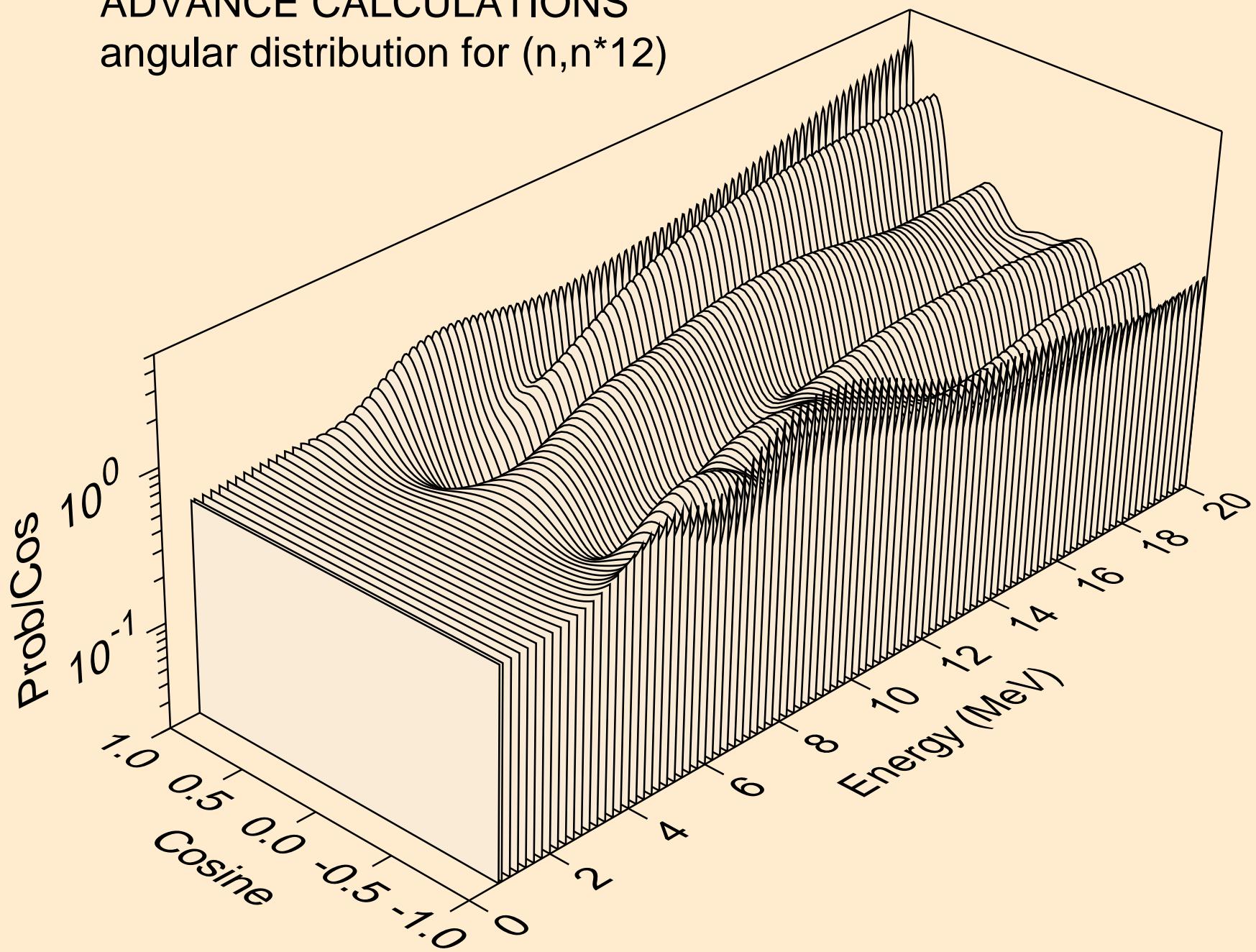
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*11)$



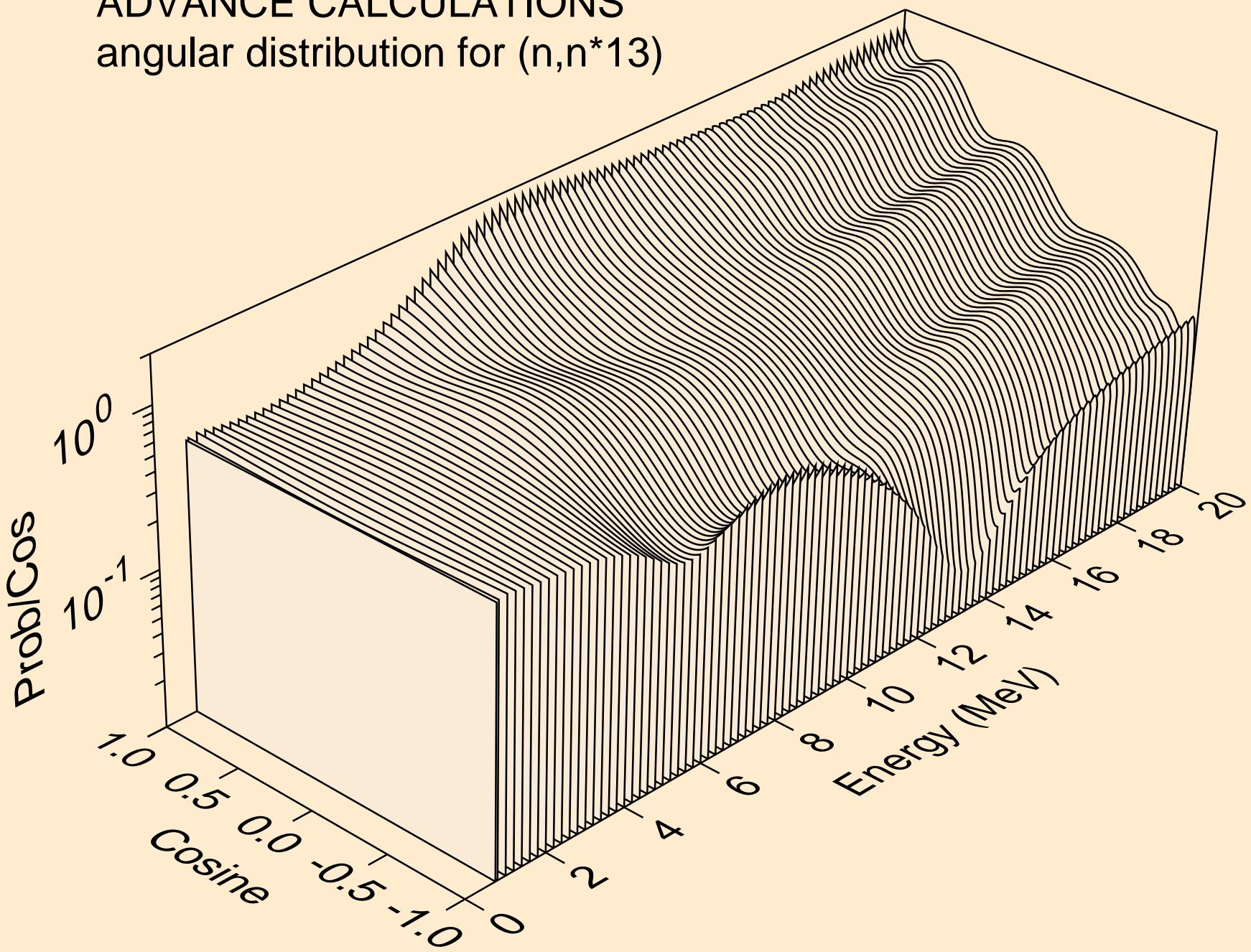
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*12)$



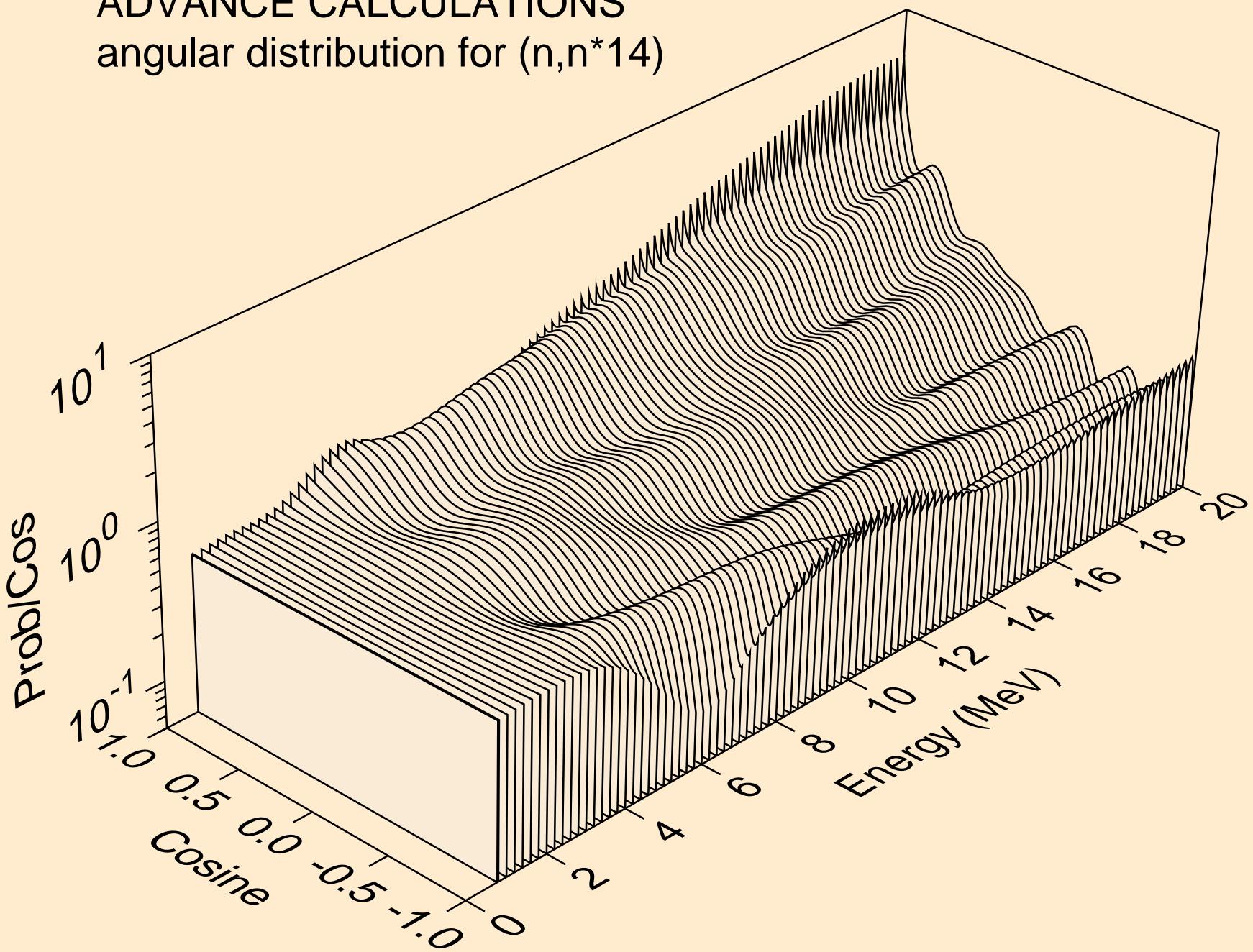
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*13)$

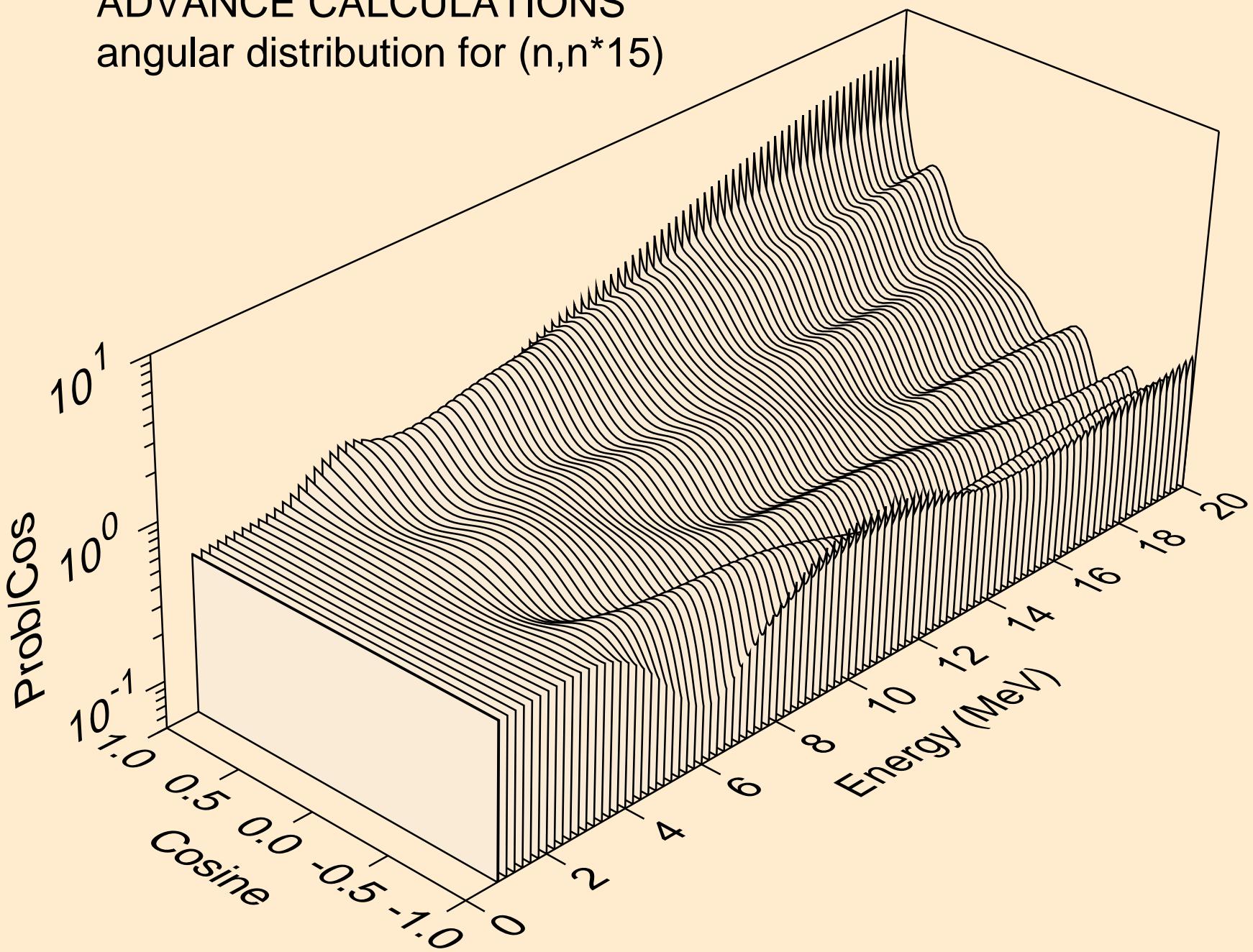


# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*14)$

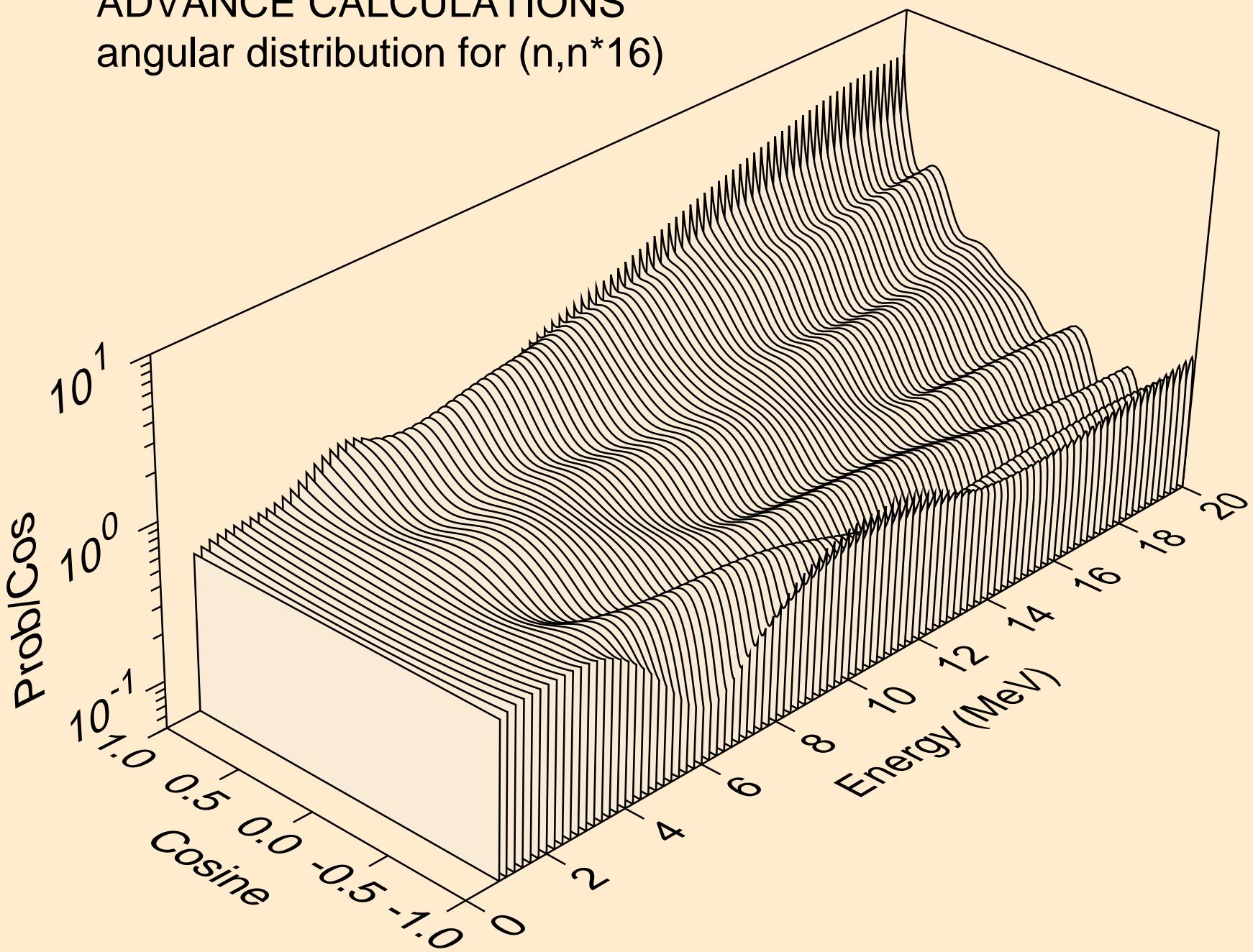


ADVANCE CALCULATIONS  
angular distribution for  $(n,n^*15)$



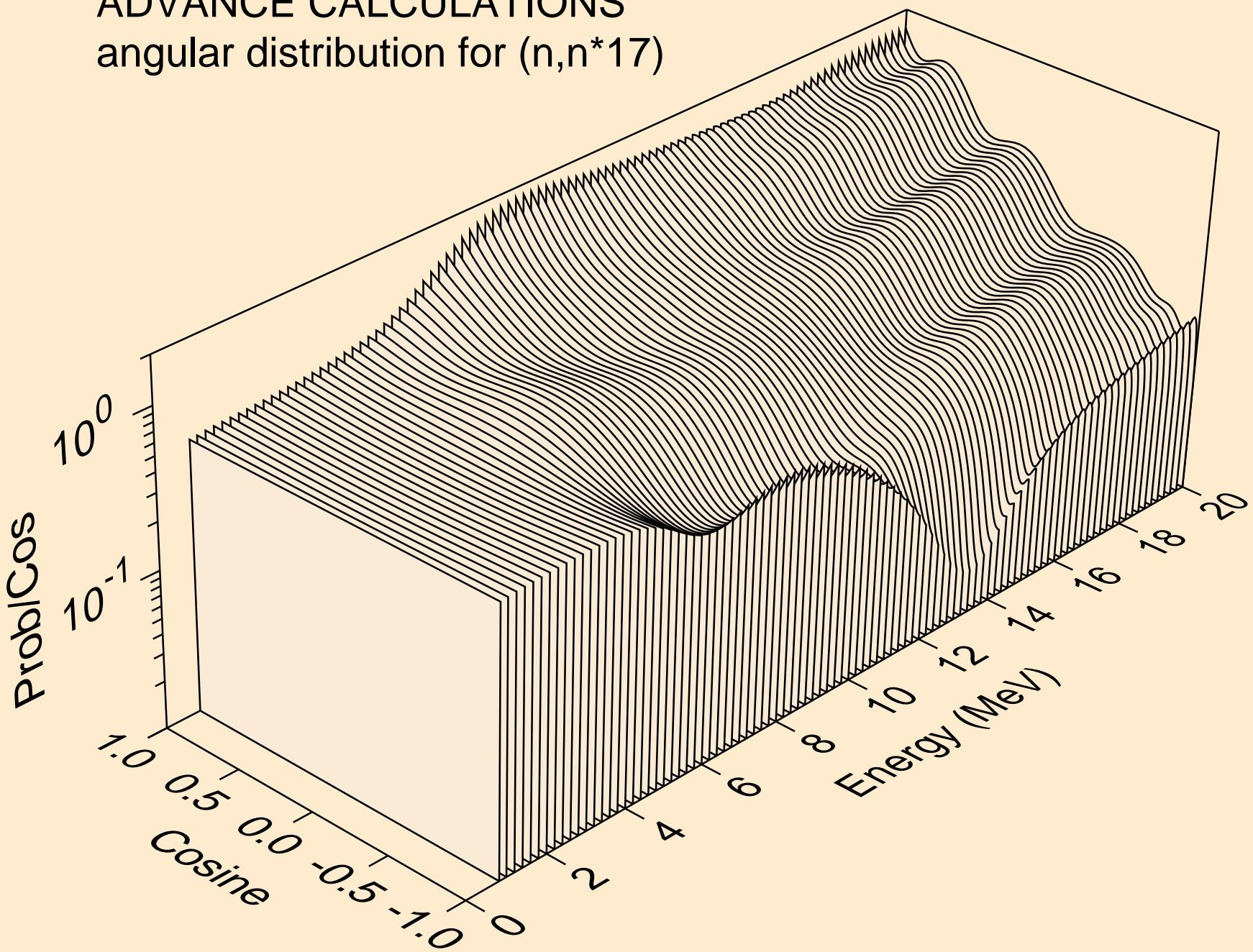
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*16)$

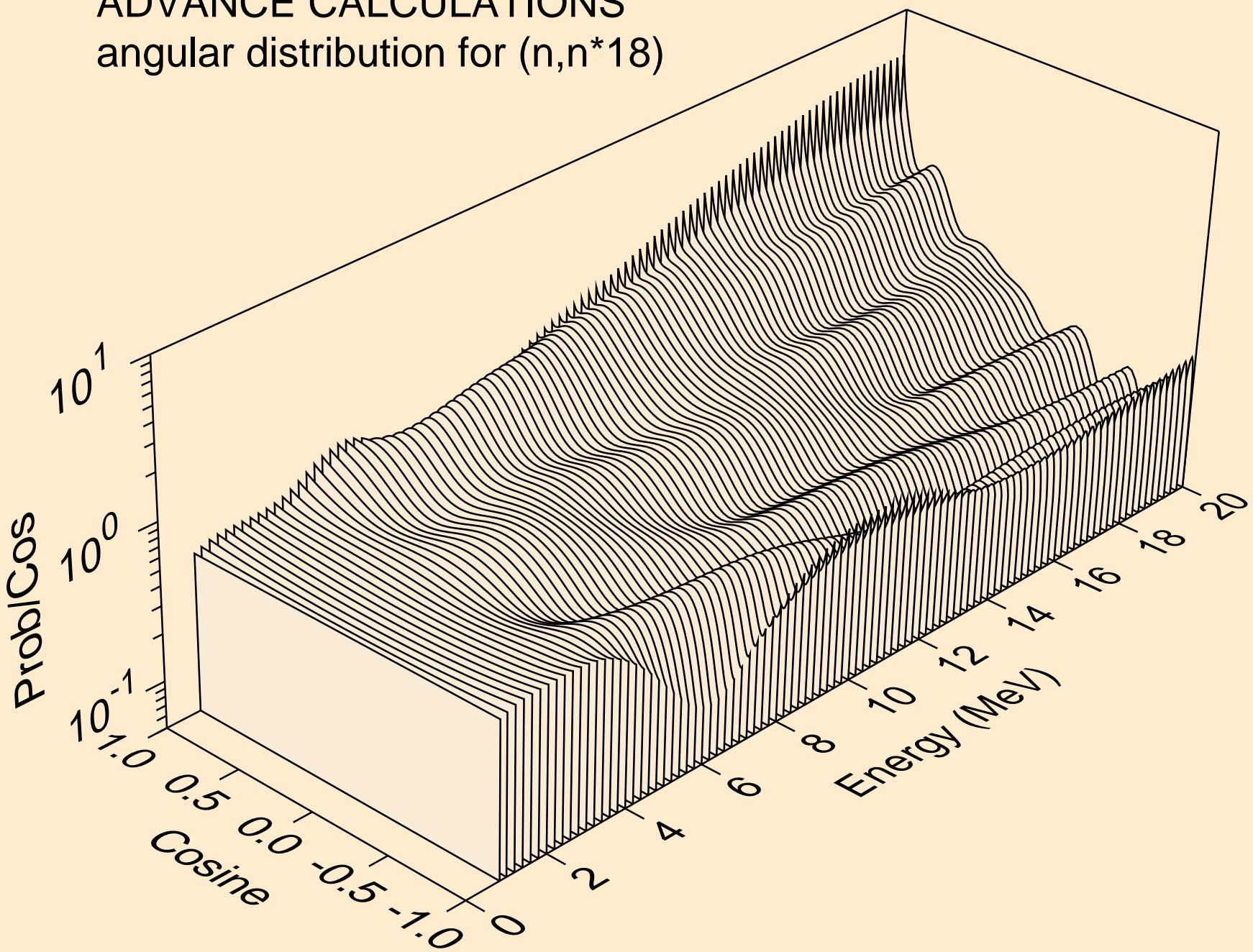


# ADVANCE CALCULATIONS

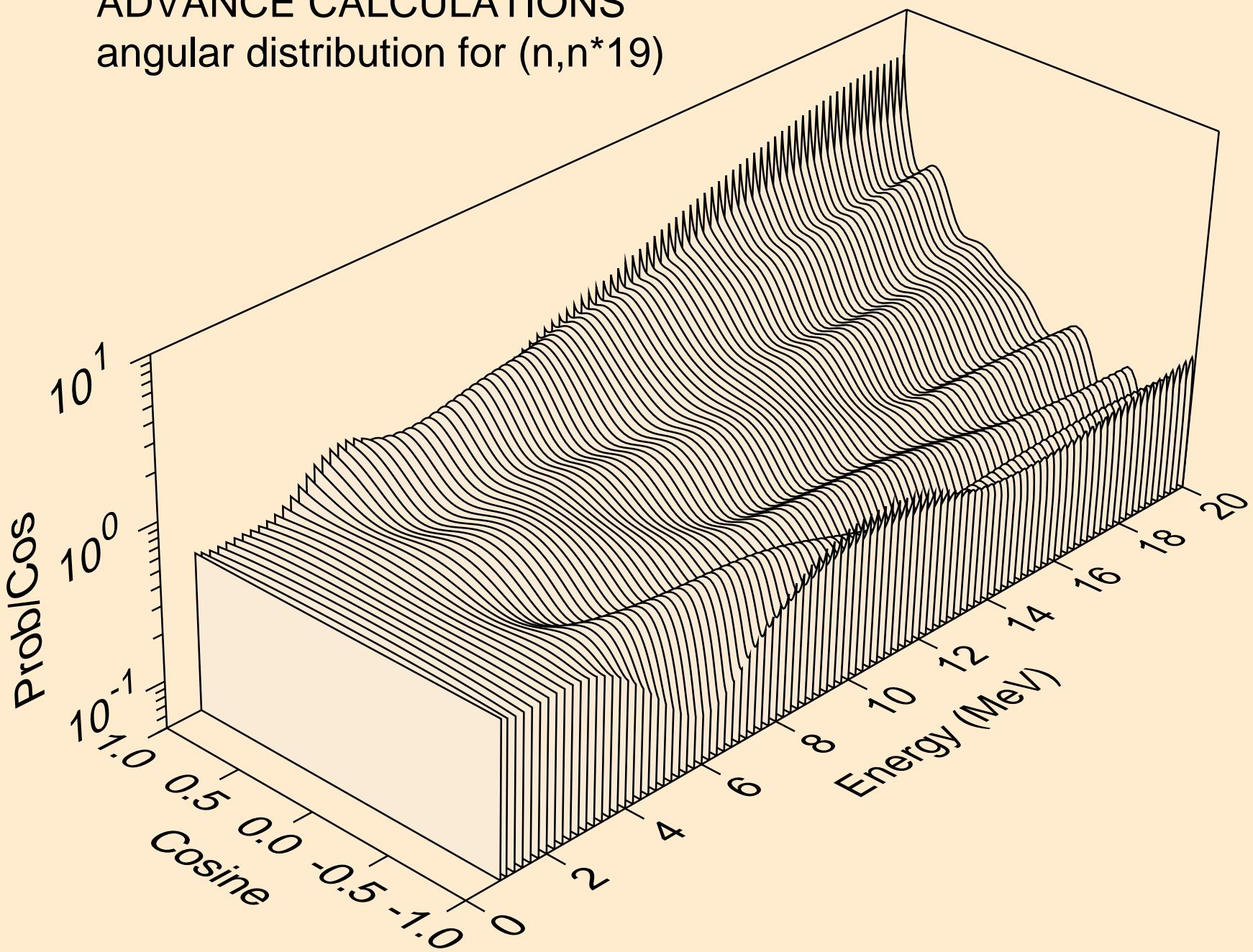
angular distribution for  $(n,n^*17)$



ADVANCE CALCULATIONS  
angular distribution for  $(n,n^*18)$

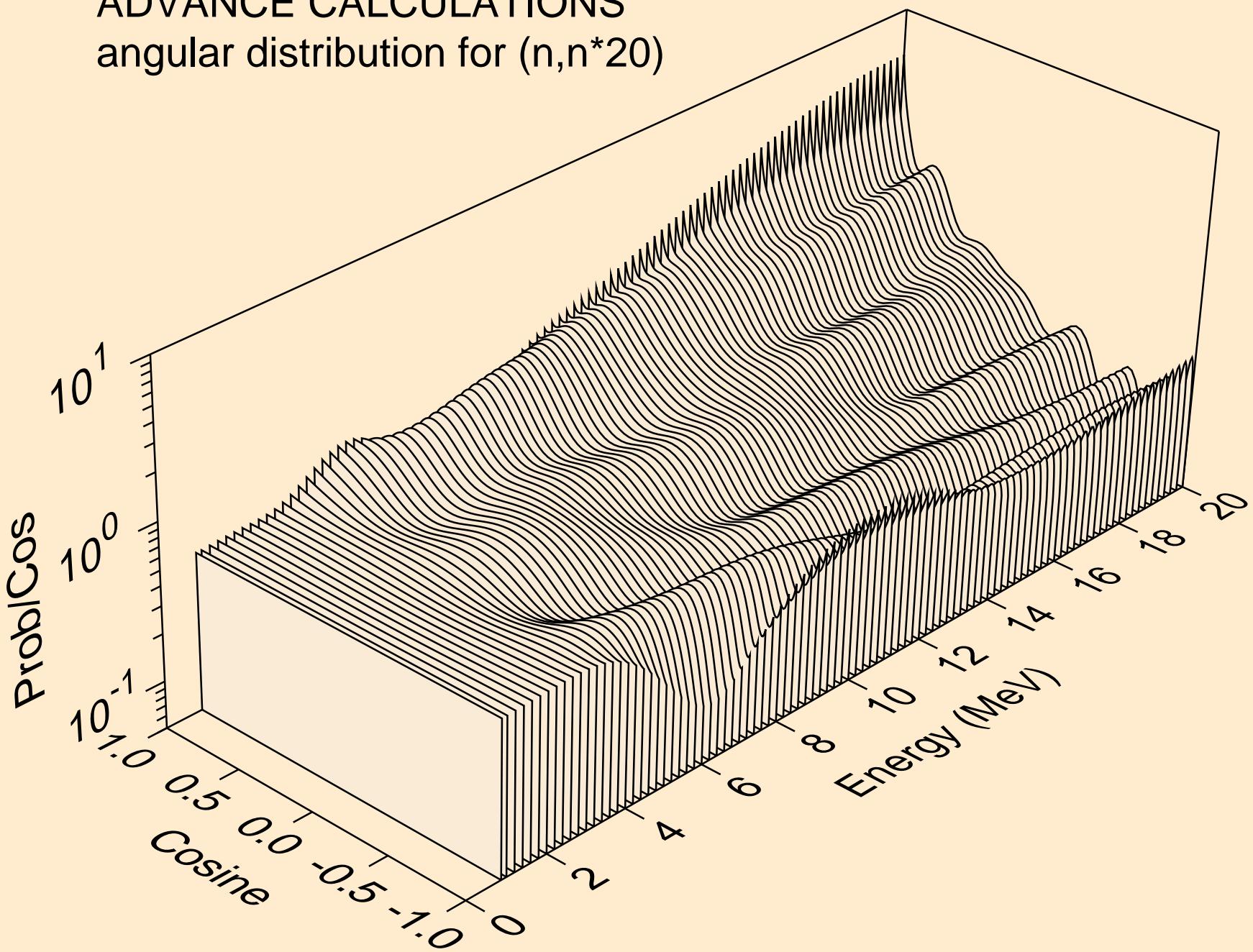


ADVANCE CALCULATIONS  
angular distribution for  $(n,n^*19)$



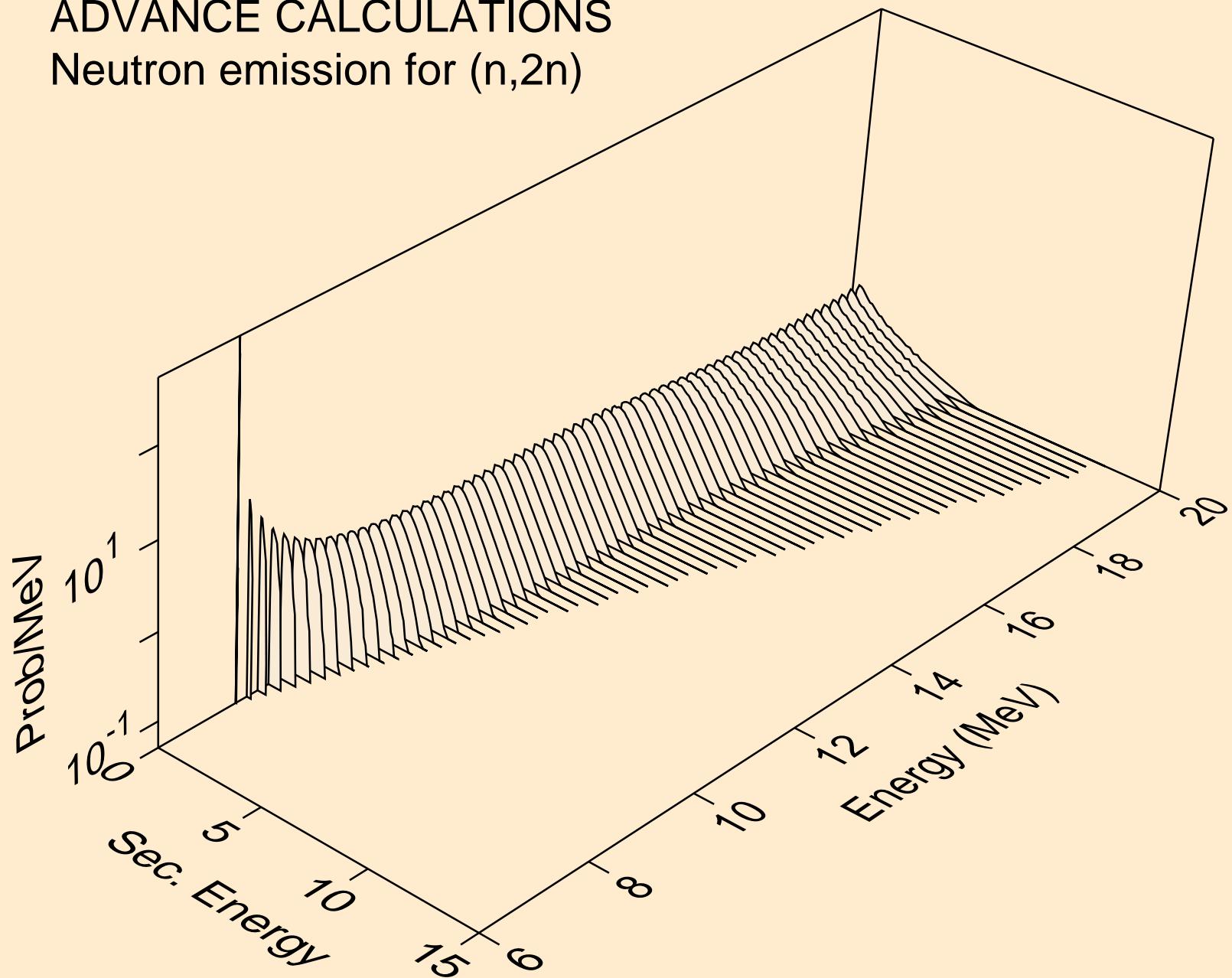
# ADVANCE CALCULATIONS

angular distribution for  $(n,n^*)20$



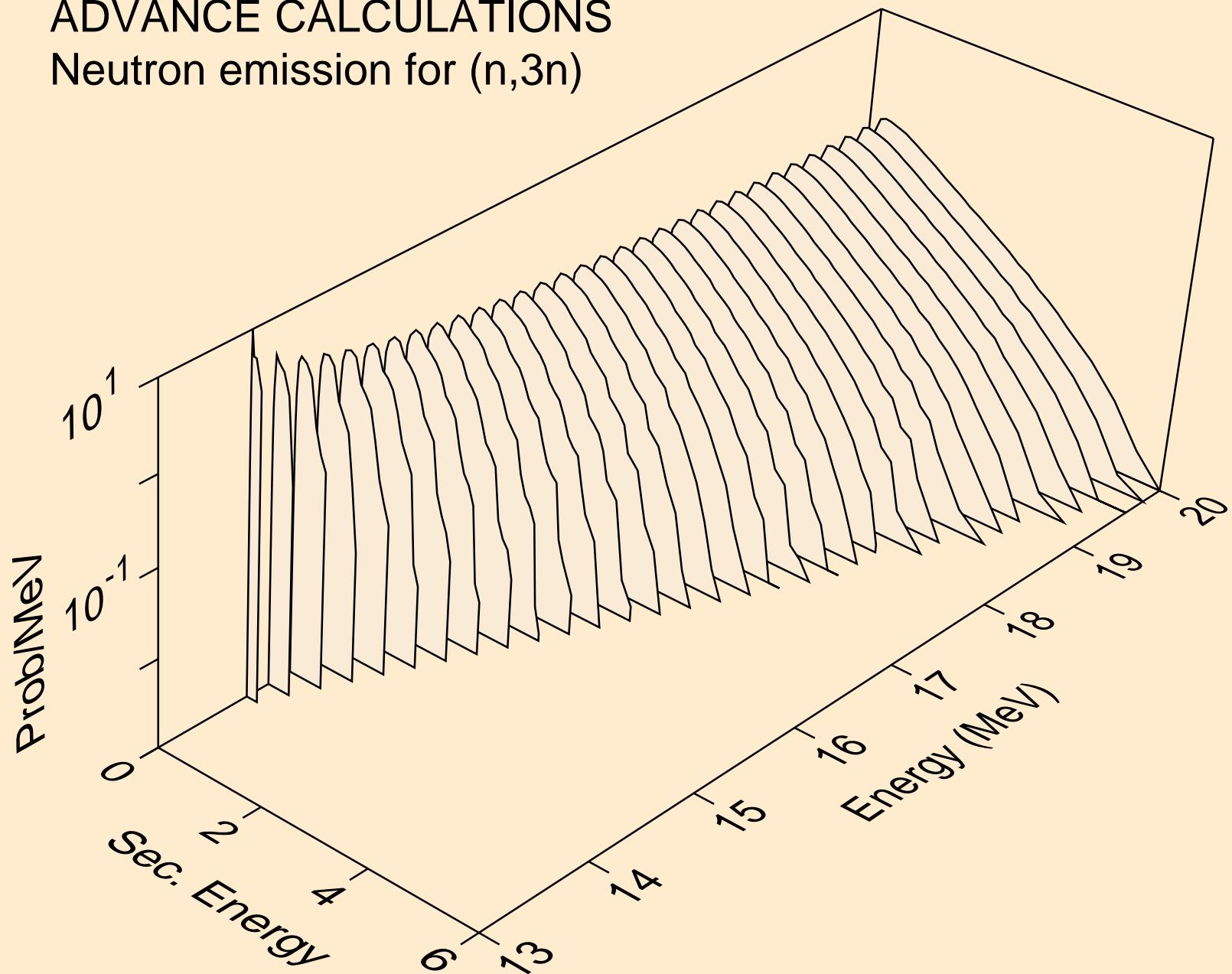
# ADVANCE CALCULATIONS

## Neutron emission for (n,2n)



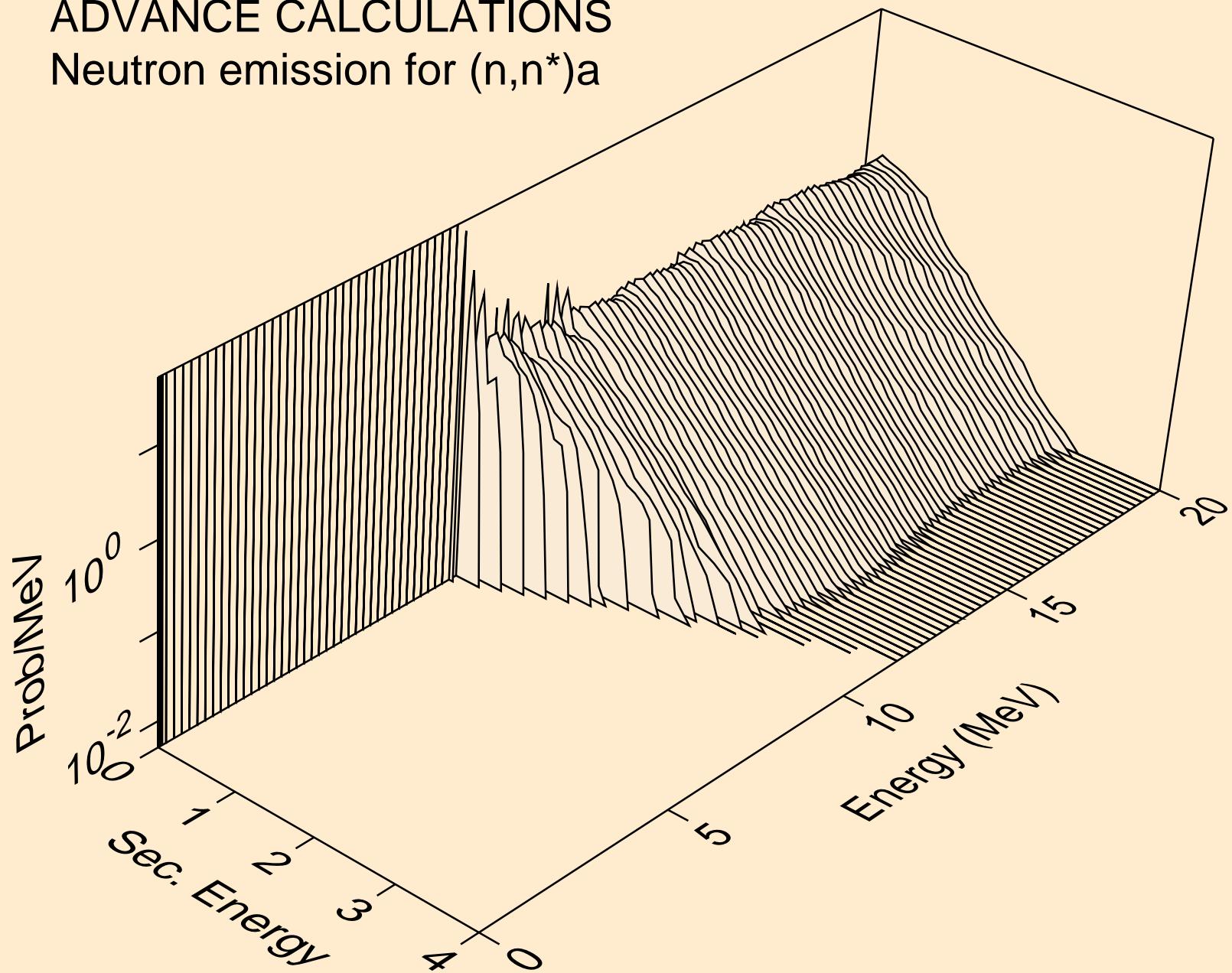
# ADVANCE CALCULATIONS

## Neutron emission for (n,3n)



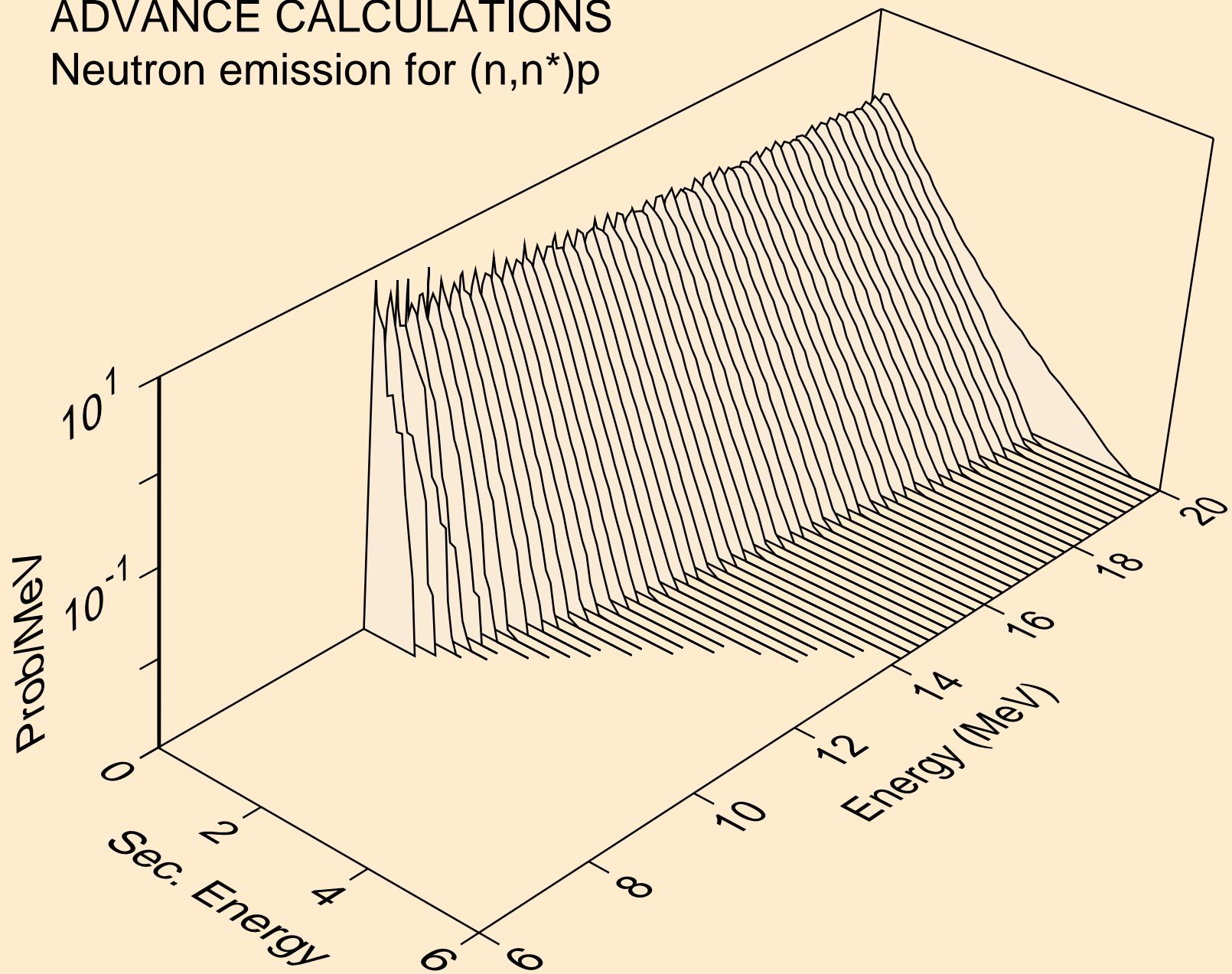
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*)a$



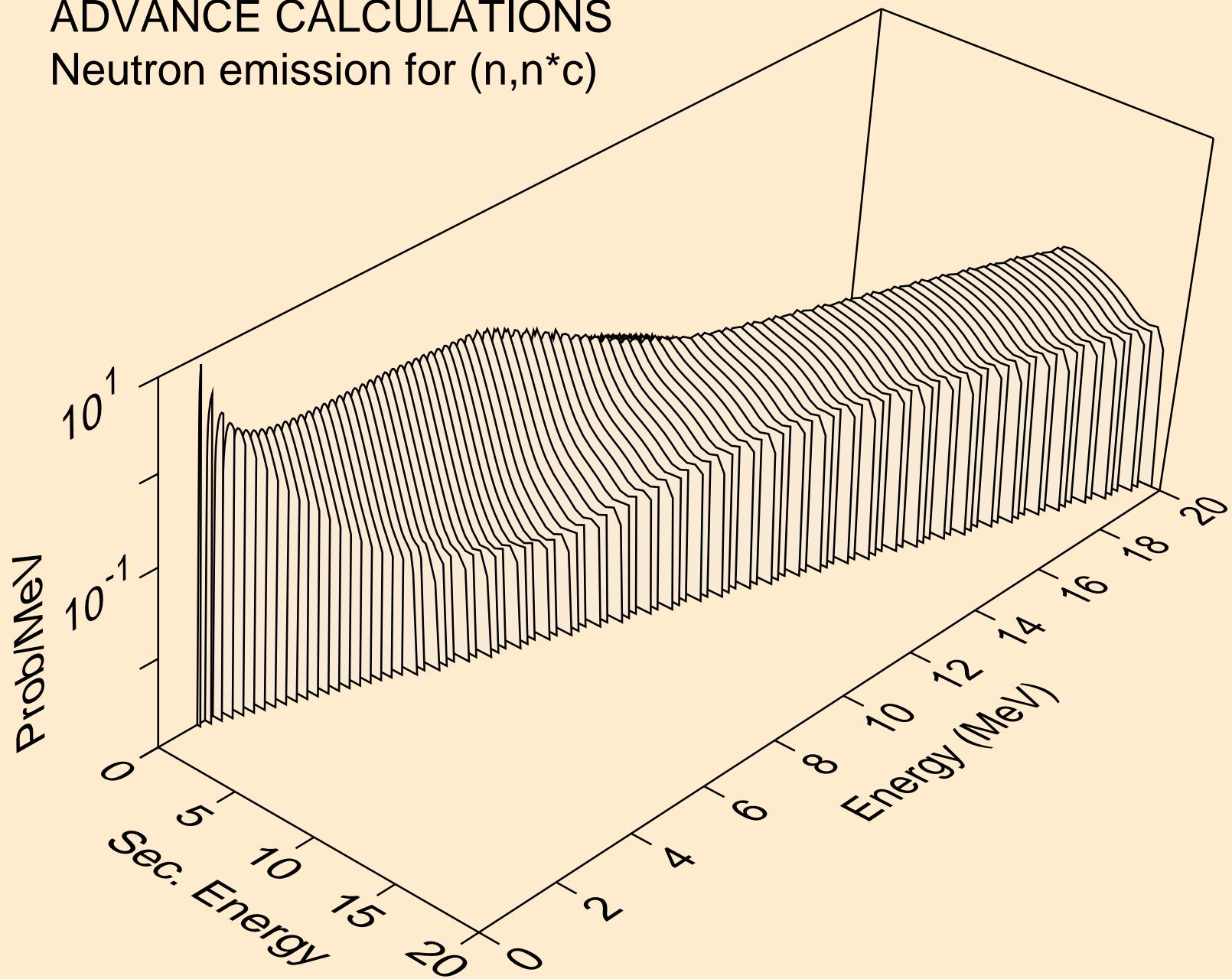
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*)p$



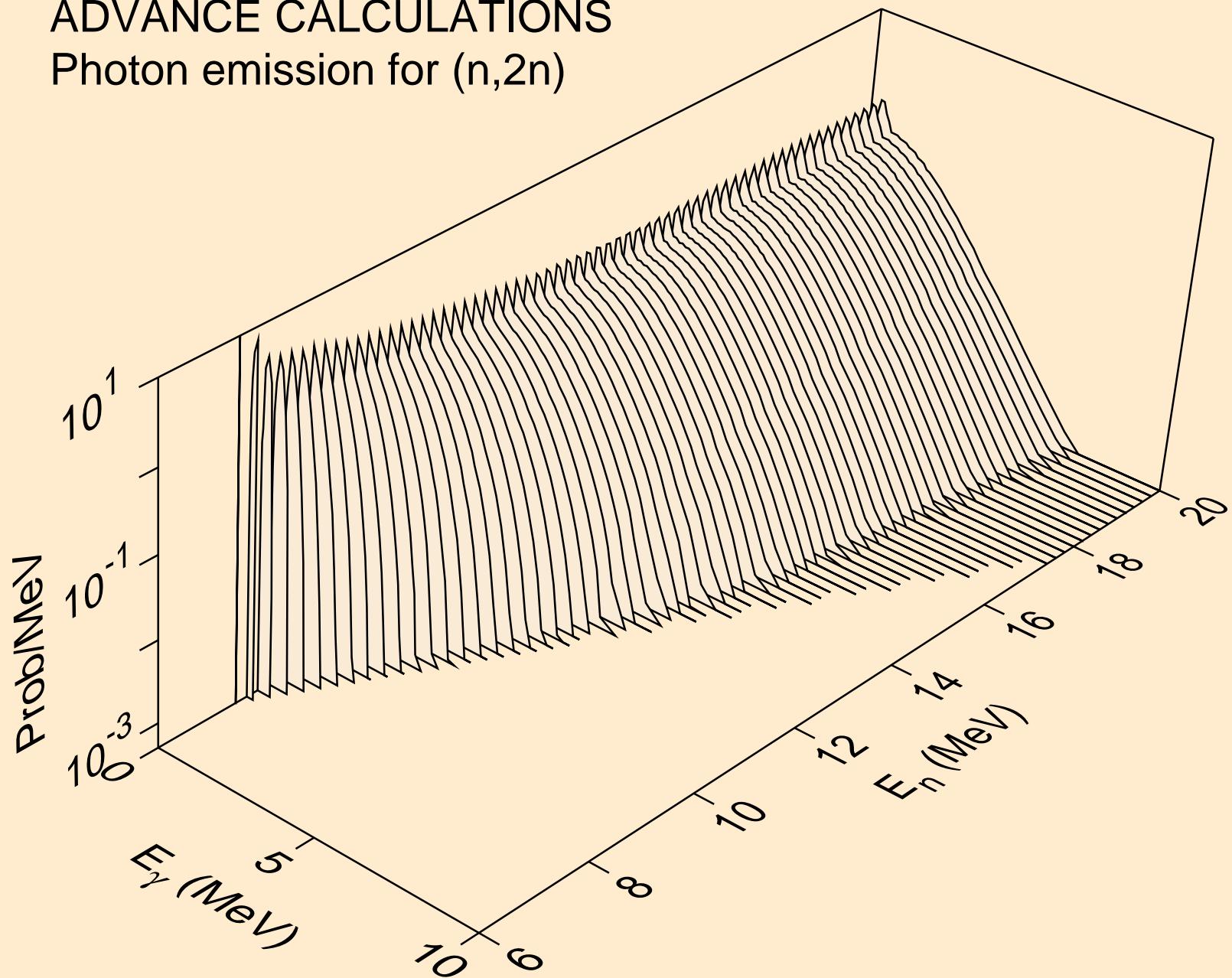
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*c)$



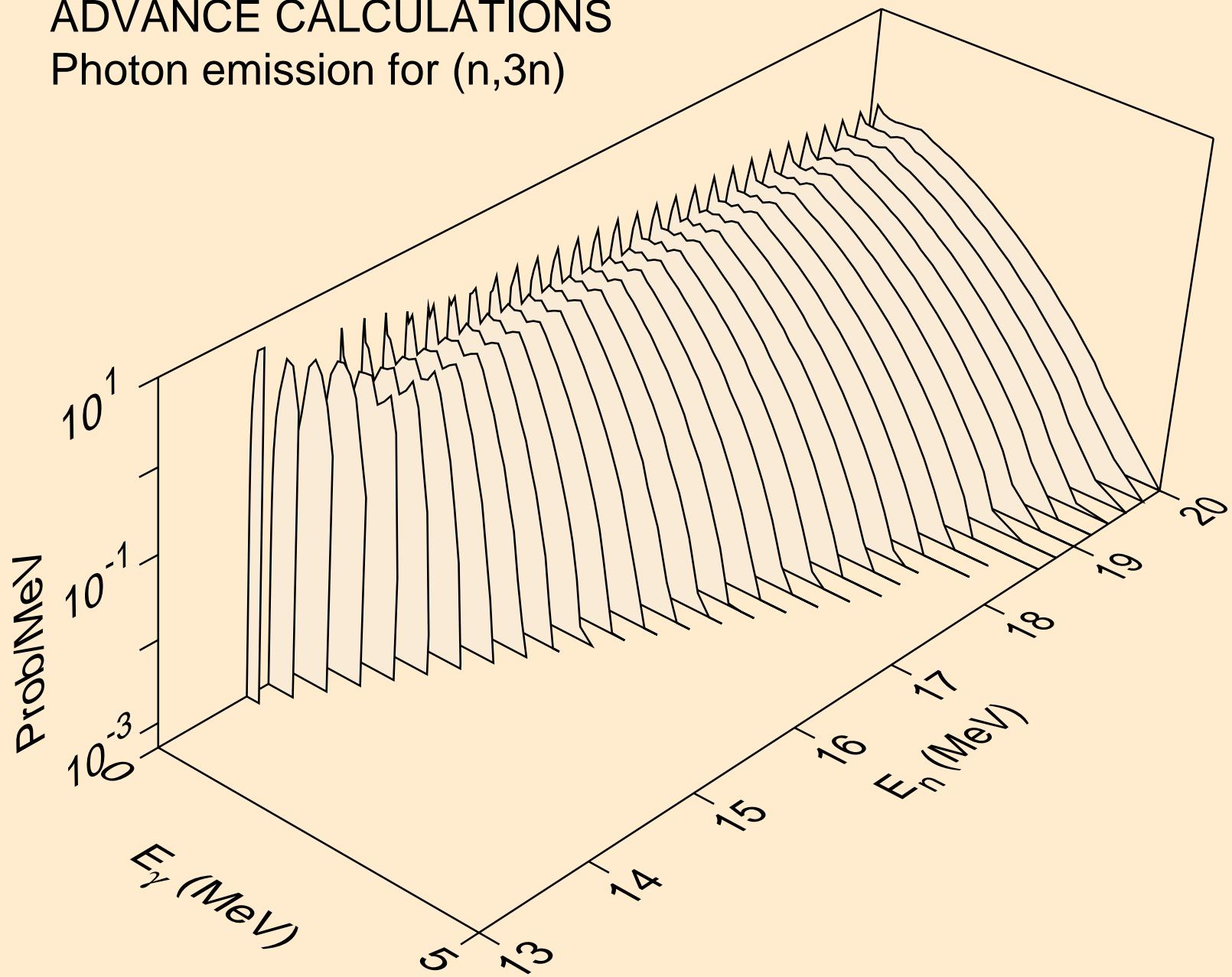
# ADVANCE CALCULATIONS

## Photon emission for (n,2n)



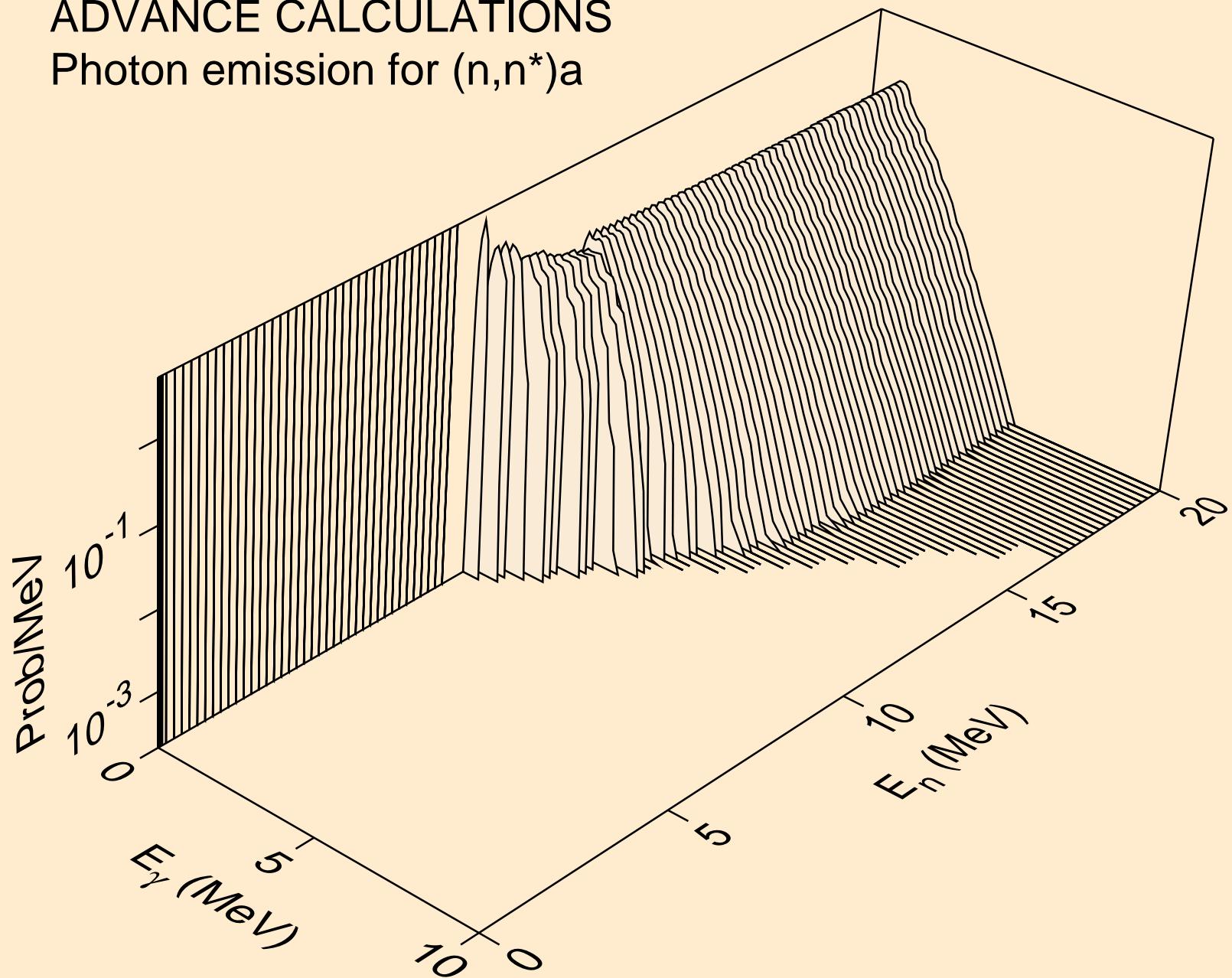
# ADVANCE CALCULATIONS

## Photon emission for (n,3n)



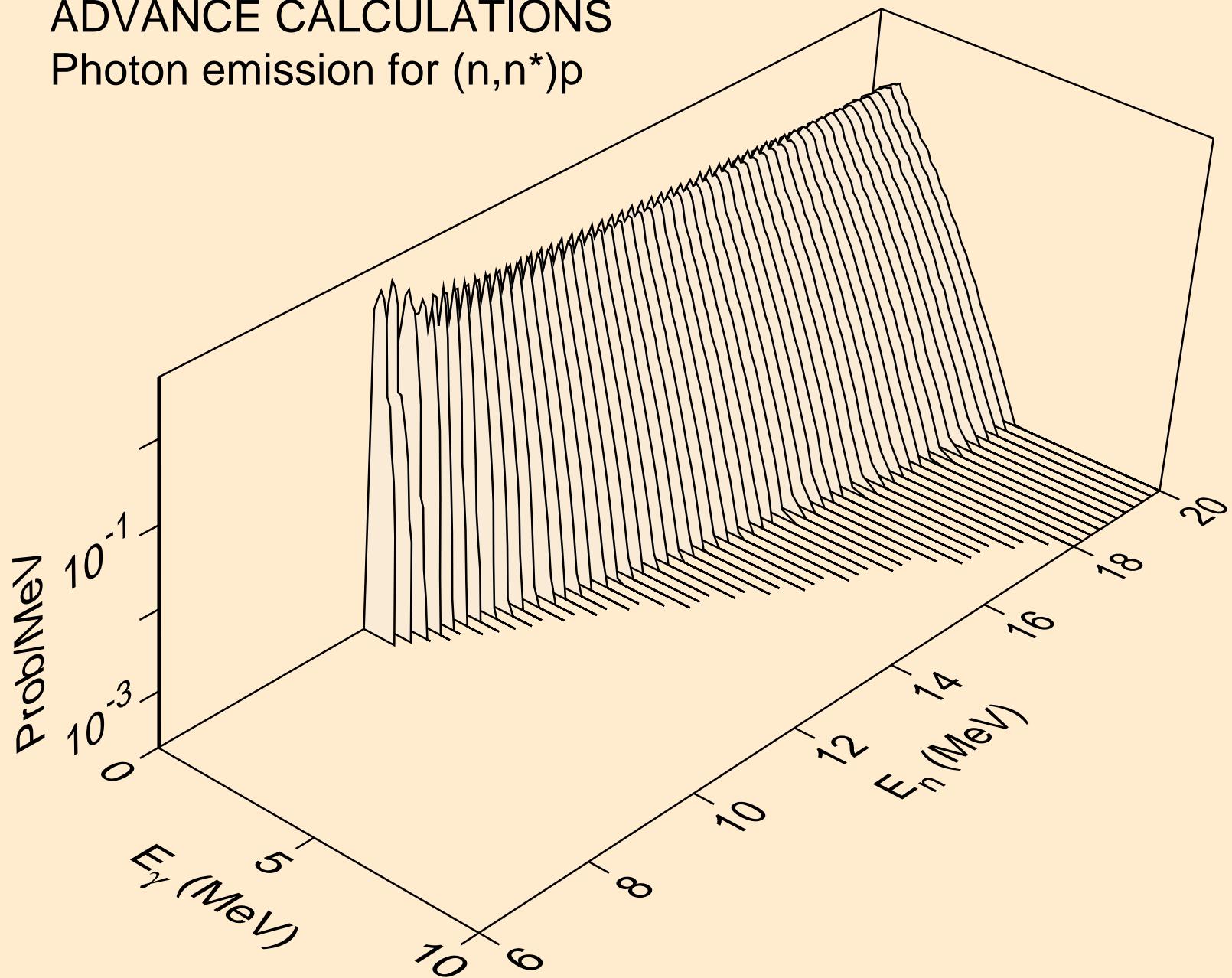
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*)a$



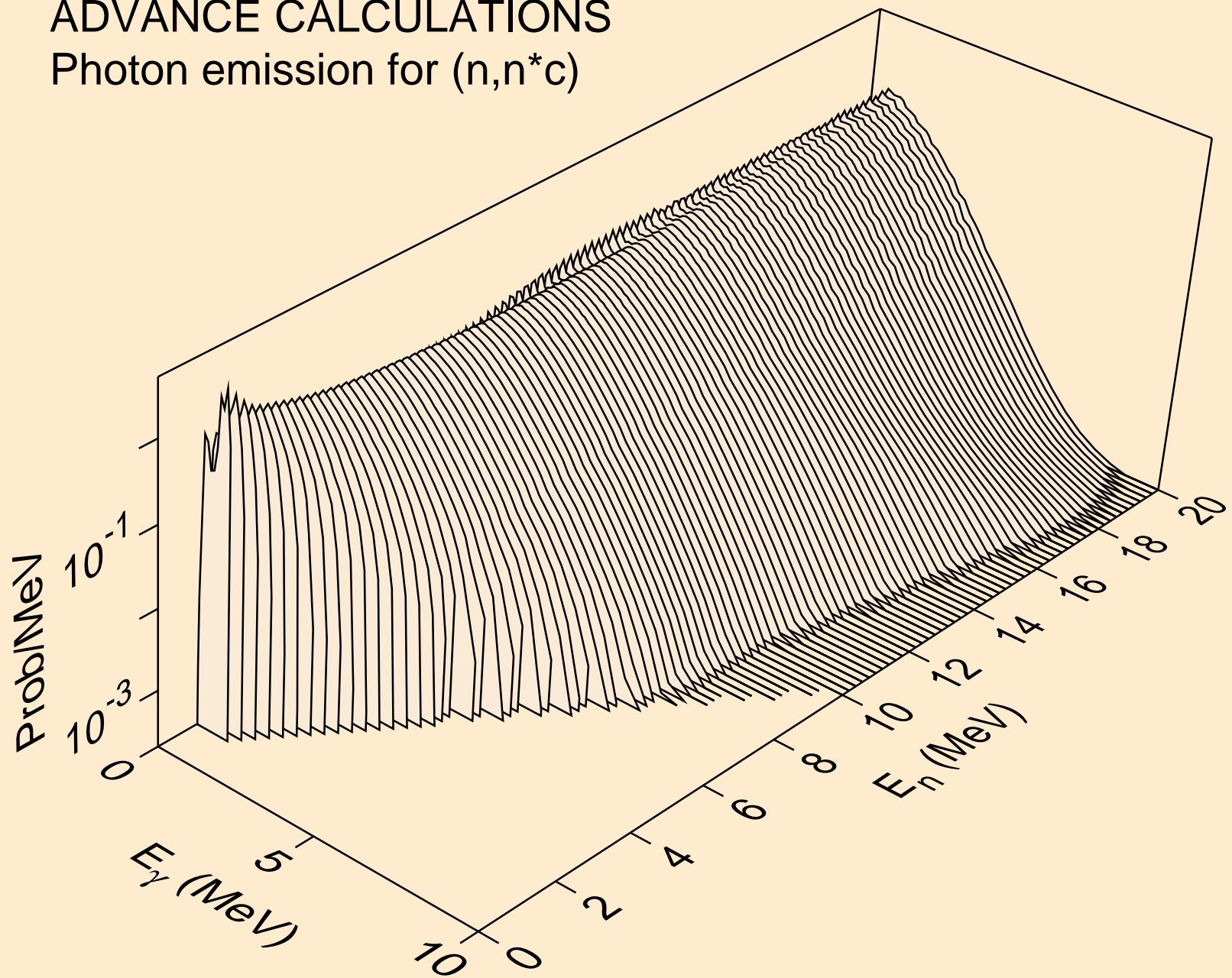
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*)p$



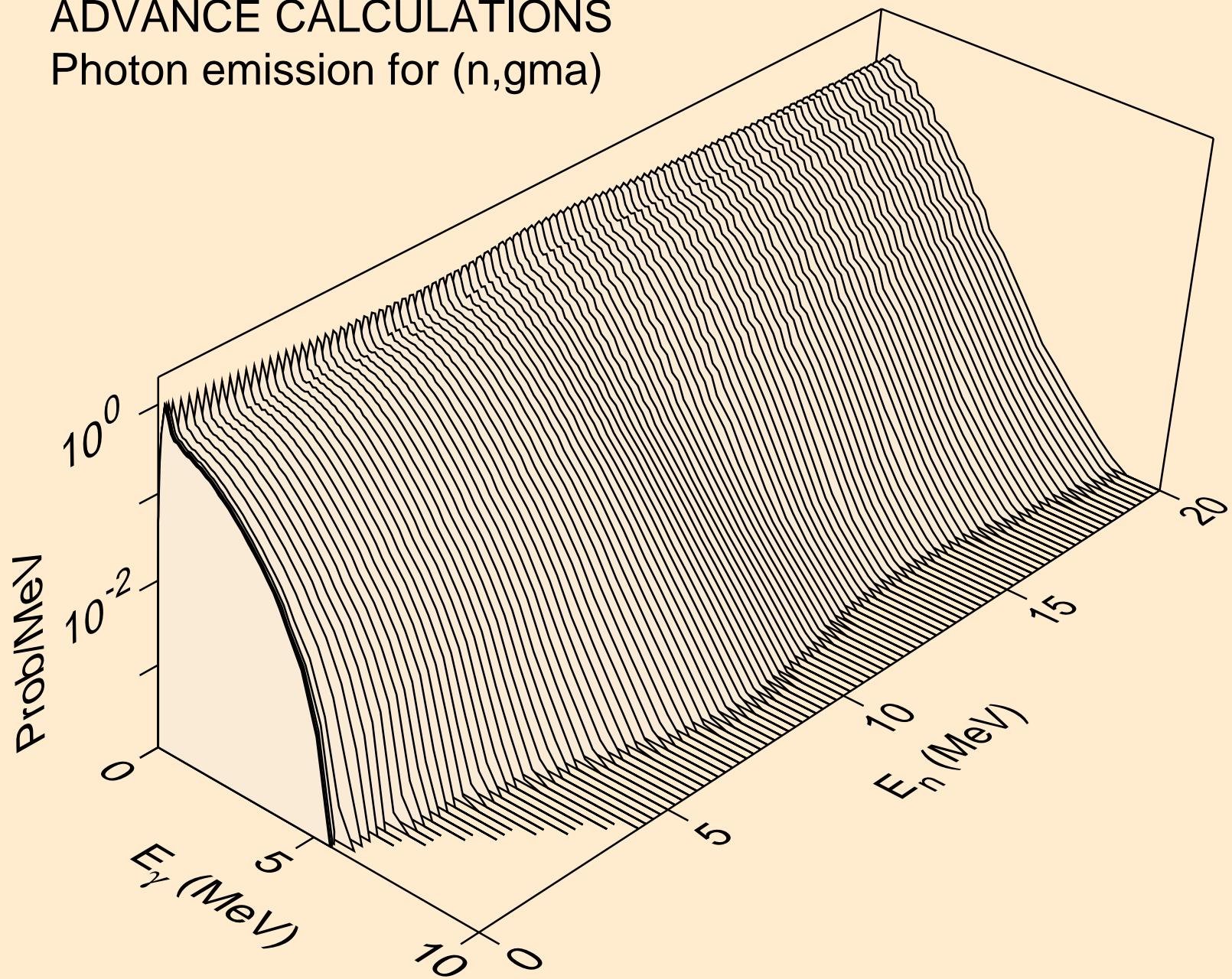
# ADVANCE CALCULATIONS

## Photon emission for $(n,n^*c)$



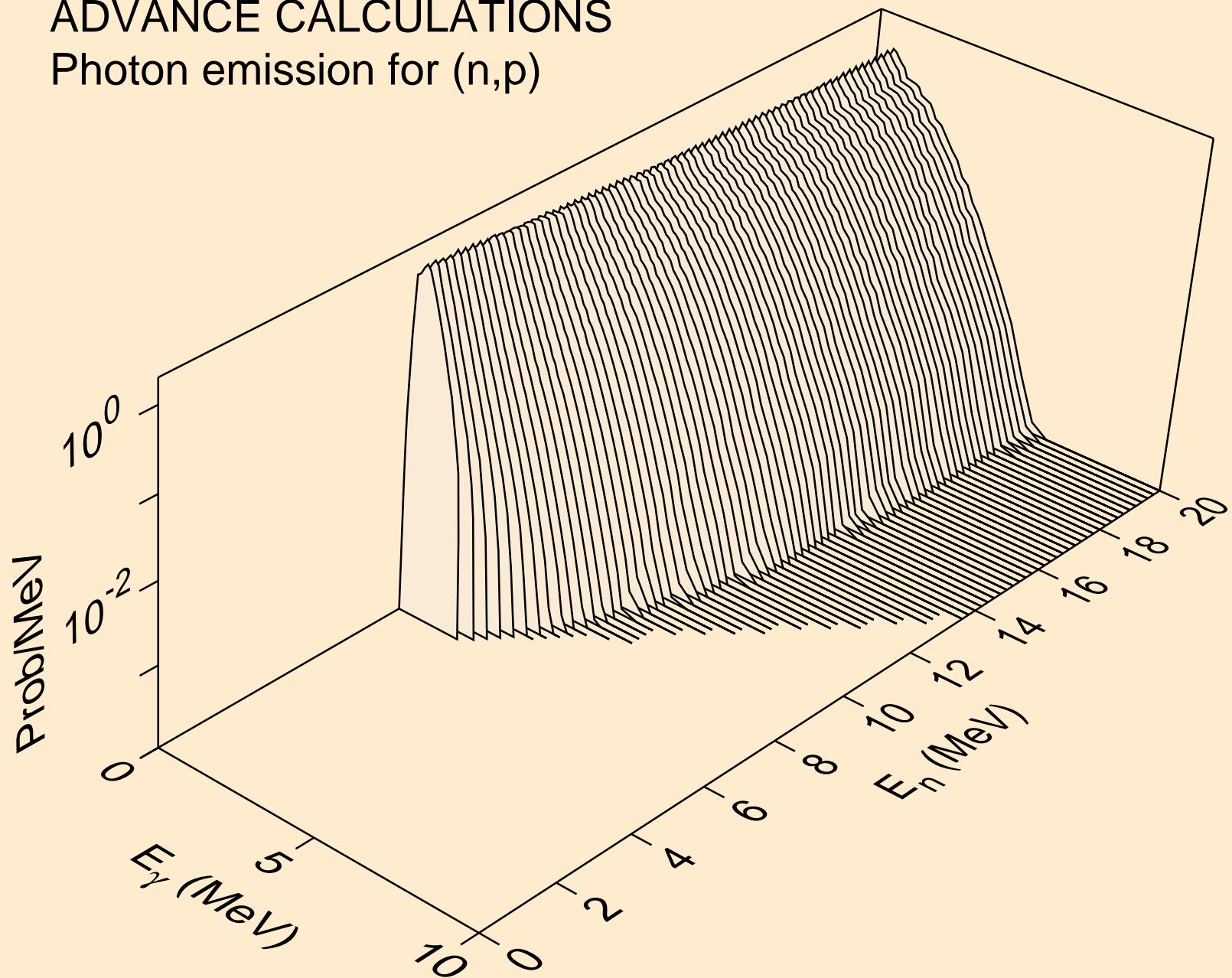
# ADVANCE CALCULATIONS

## Photon emission for (n,gma)



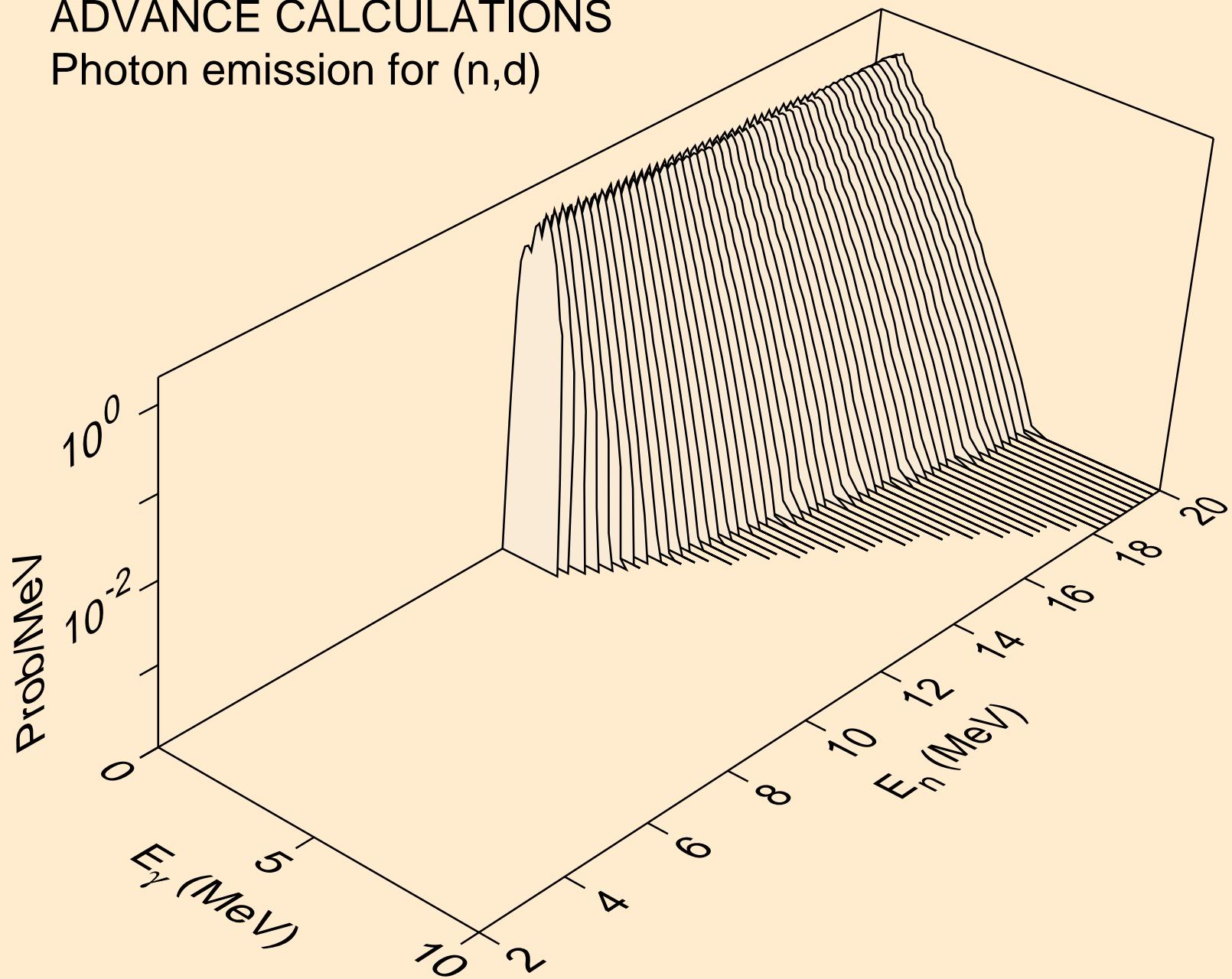
# ADVANCE CALCULATIONS

## Photon emission for (n,p)



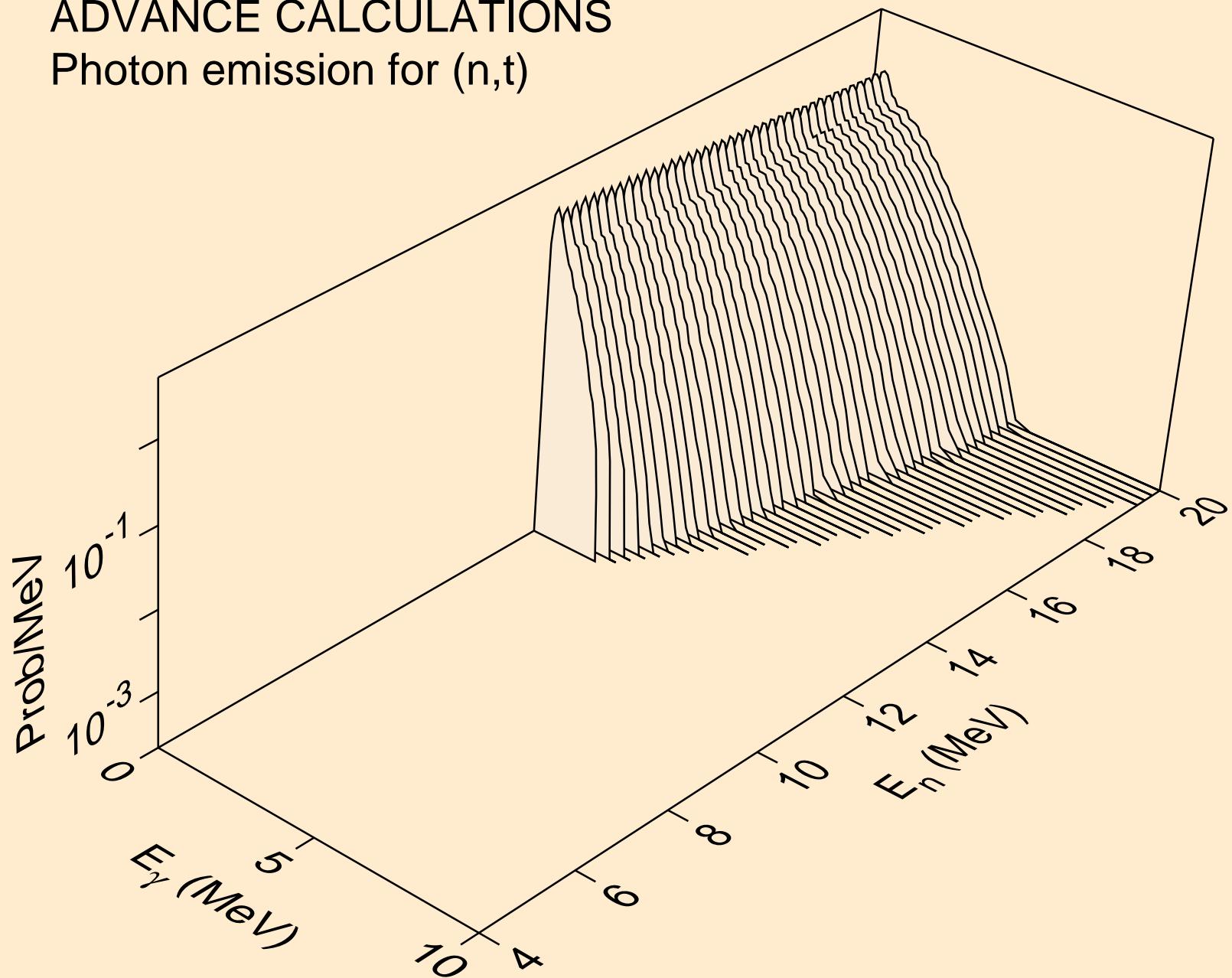
# ADVANCE CALCULATIONS

## Photon emission for (n,d)



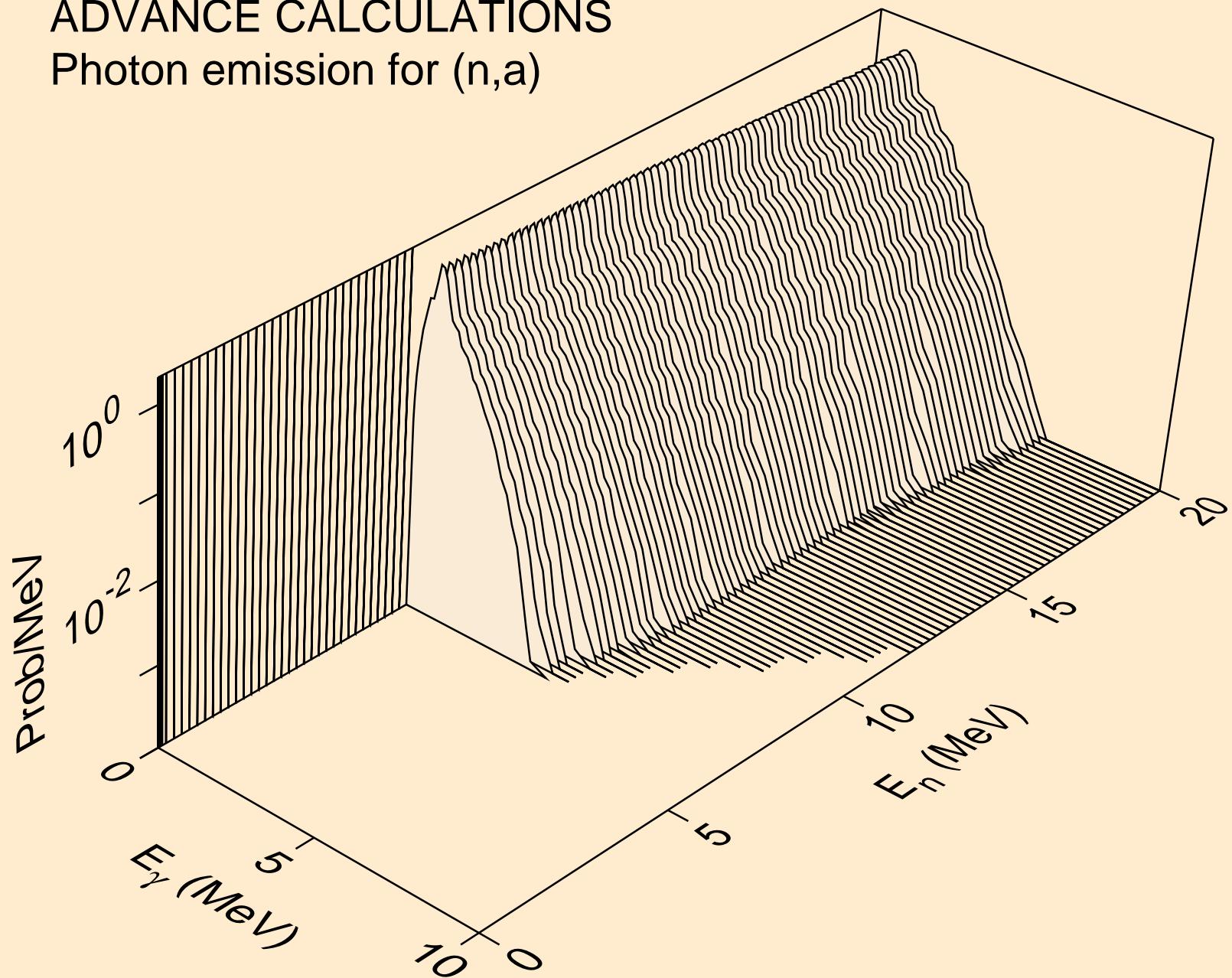
# ADVANCE CALCULATIONS

## Photon emission for (n,t)



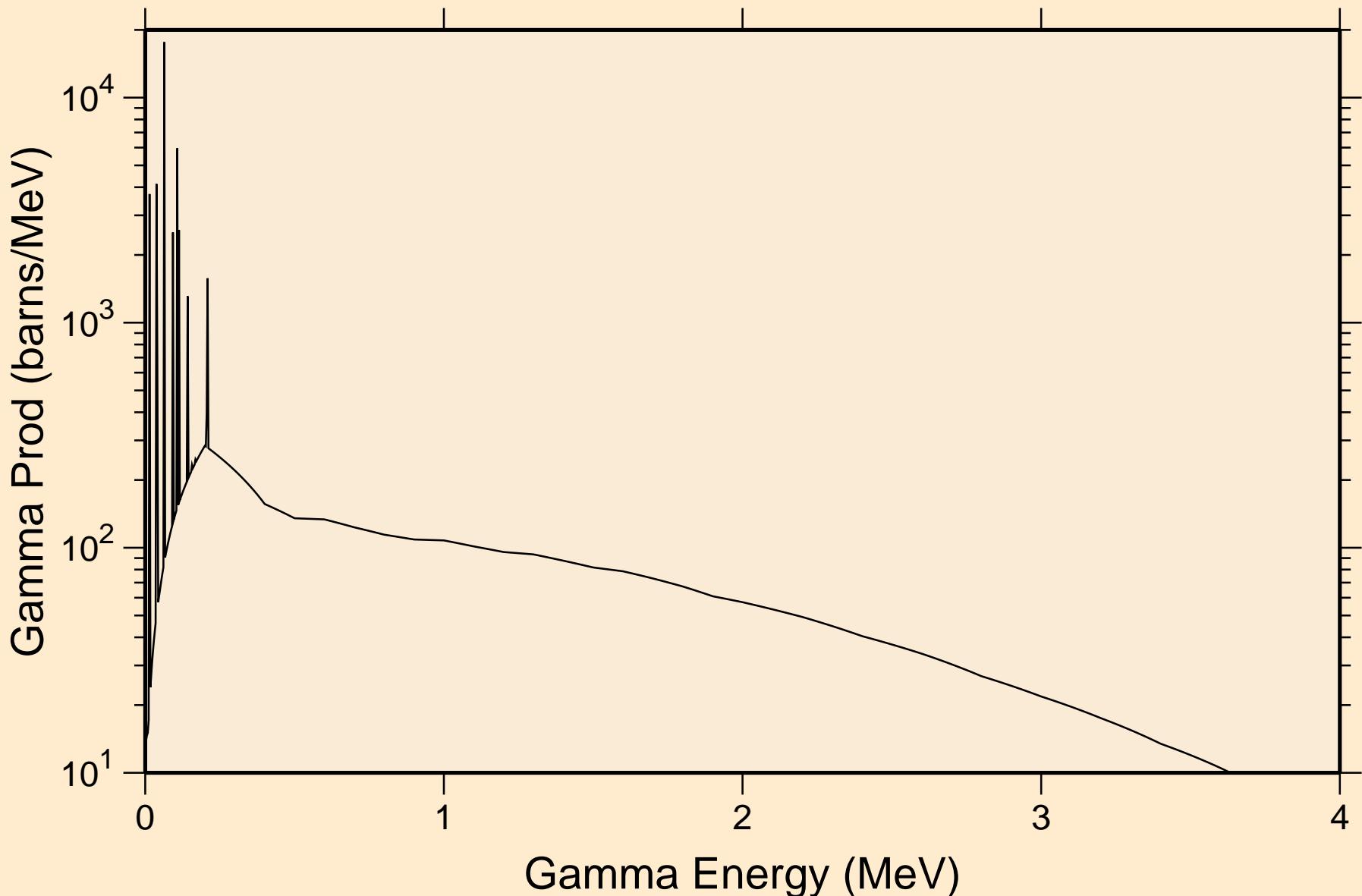
# ADVANCE CALCULATIONS

## Photon emission for (n,a)

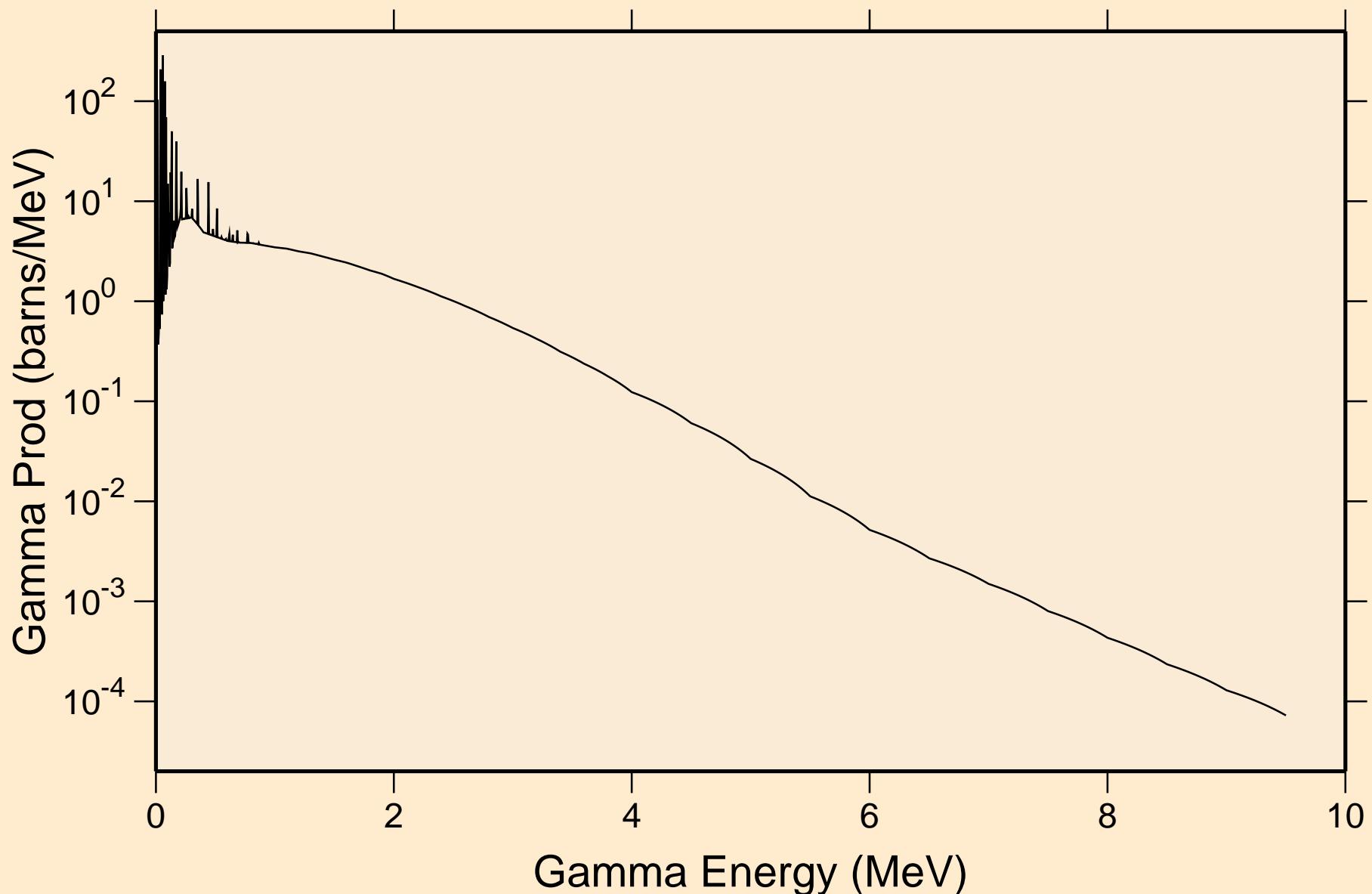


# ADVANCE CALCULATIONS

## thermal capture photon spectrum

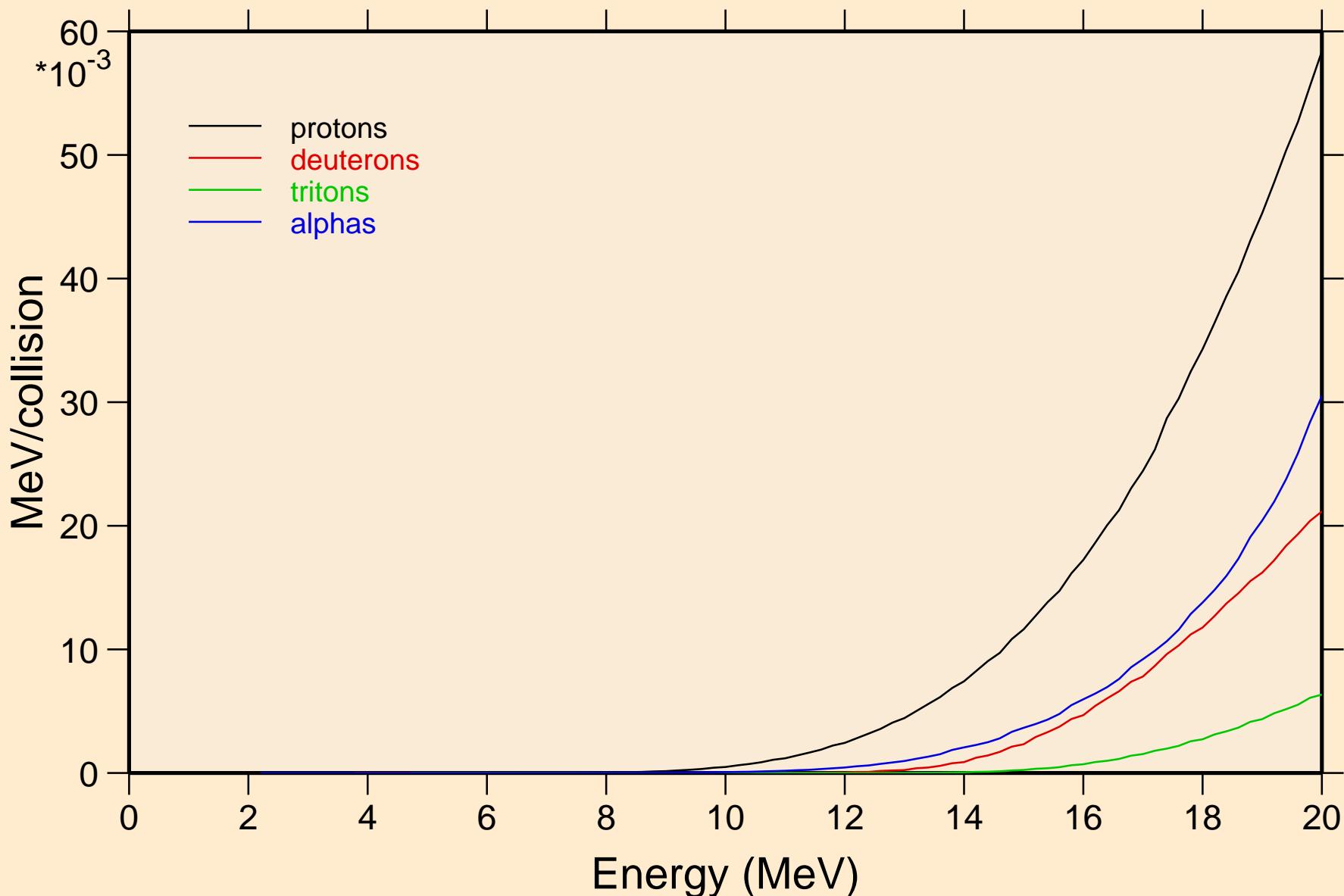


ADVANCE CALCULATIONS  
14 MeV photon spectrum



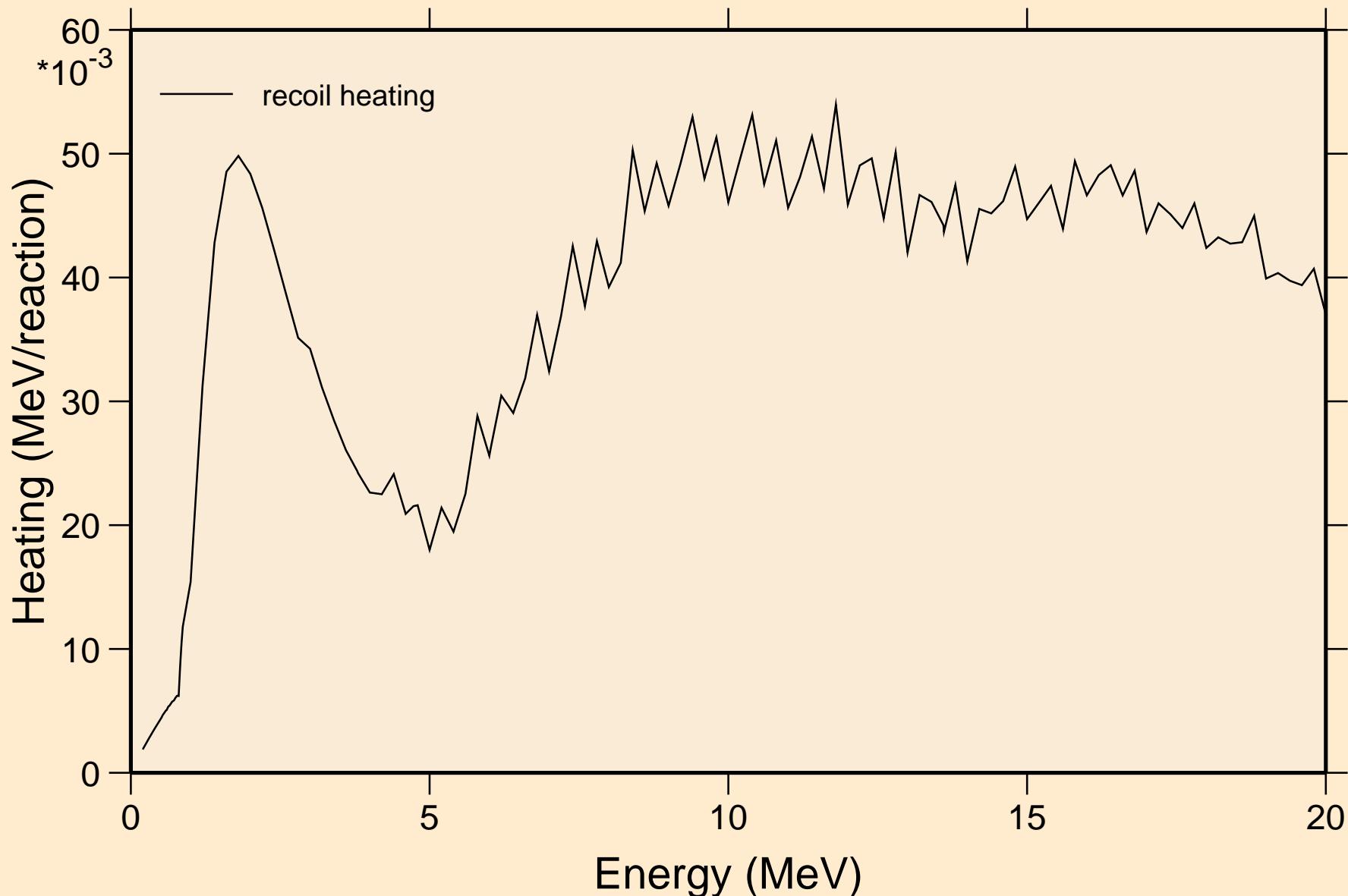
# ADVANCE CALCULATIONS

## Particle heating contributions



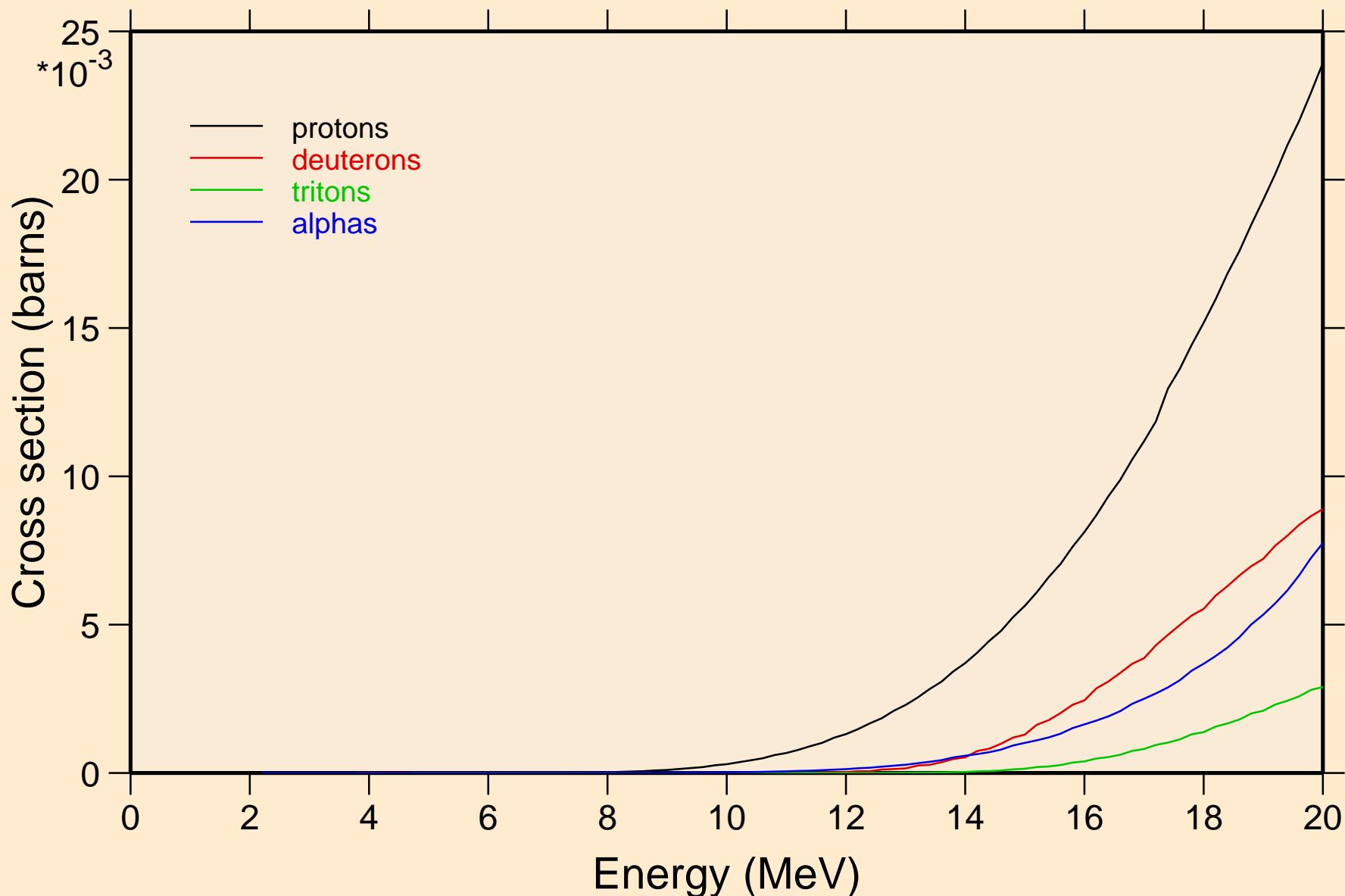
# ADVANCE CALCULATIONS

## Recoil Heating



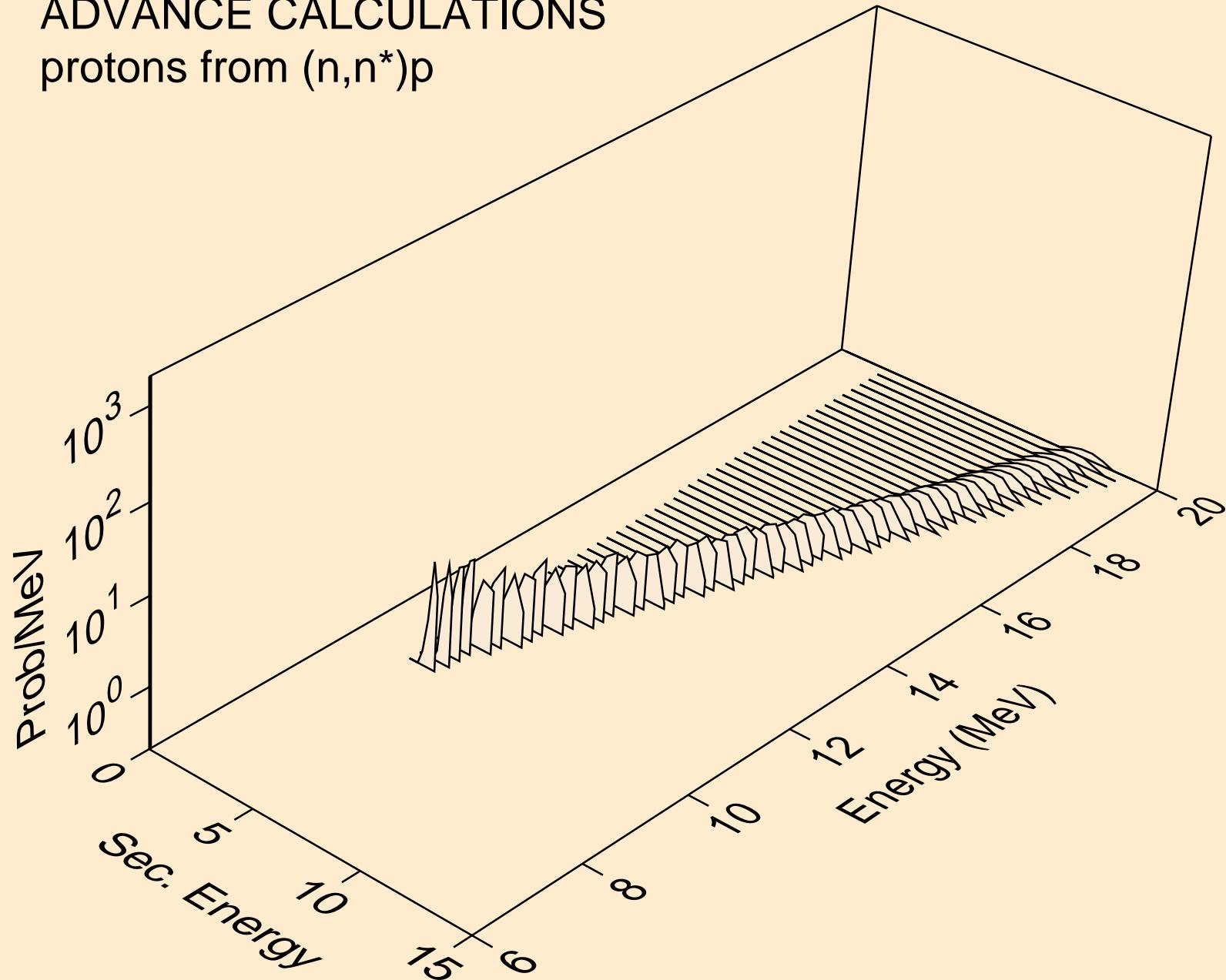
# ADVANCE CALCULATIONS

## Particle production cross sections



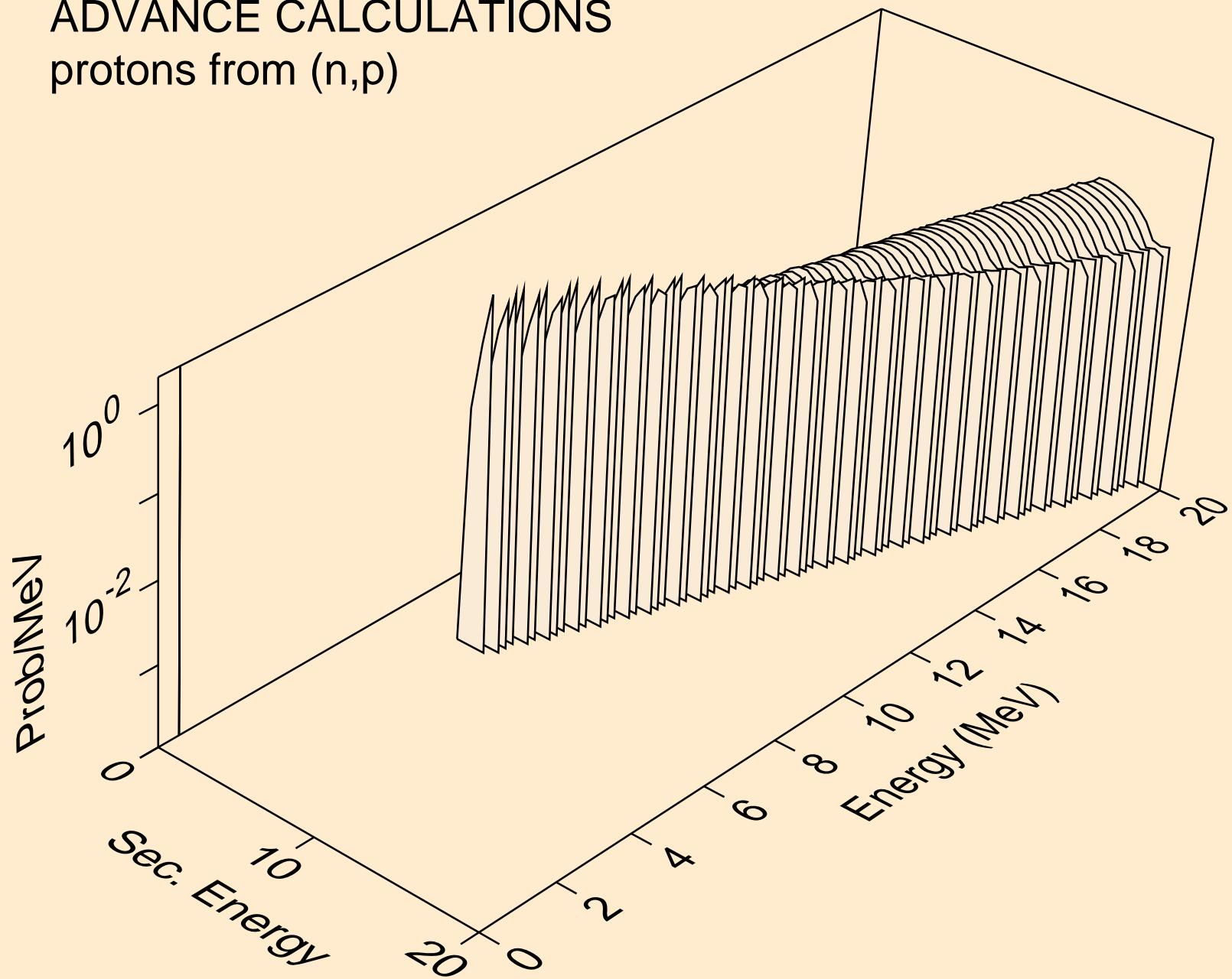
# ADVANCE CALCULATIONS

protons from  $(n,n^*)p$



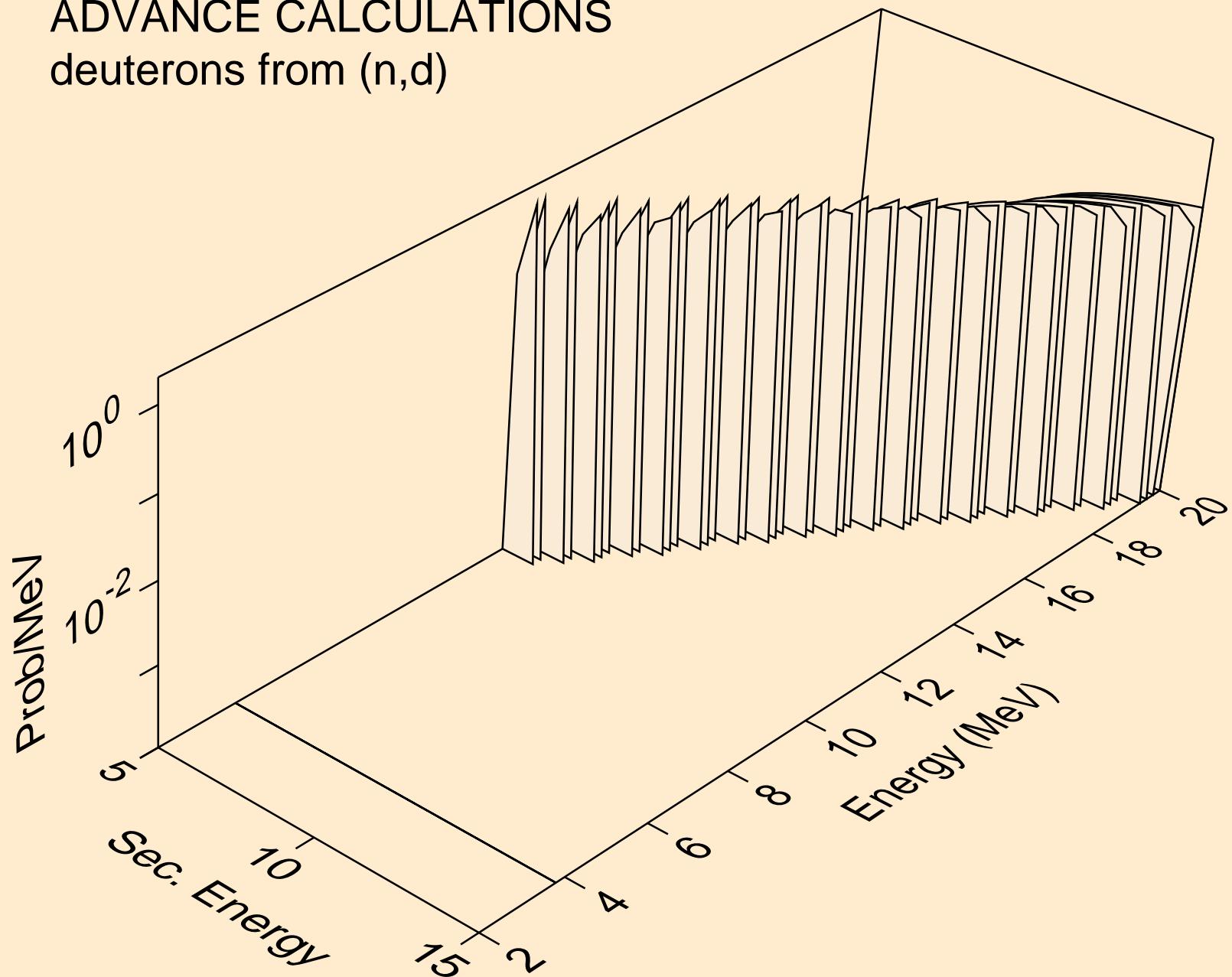
# ADVANCE CALCULATIONS

protons from (n,p)



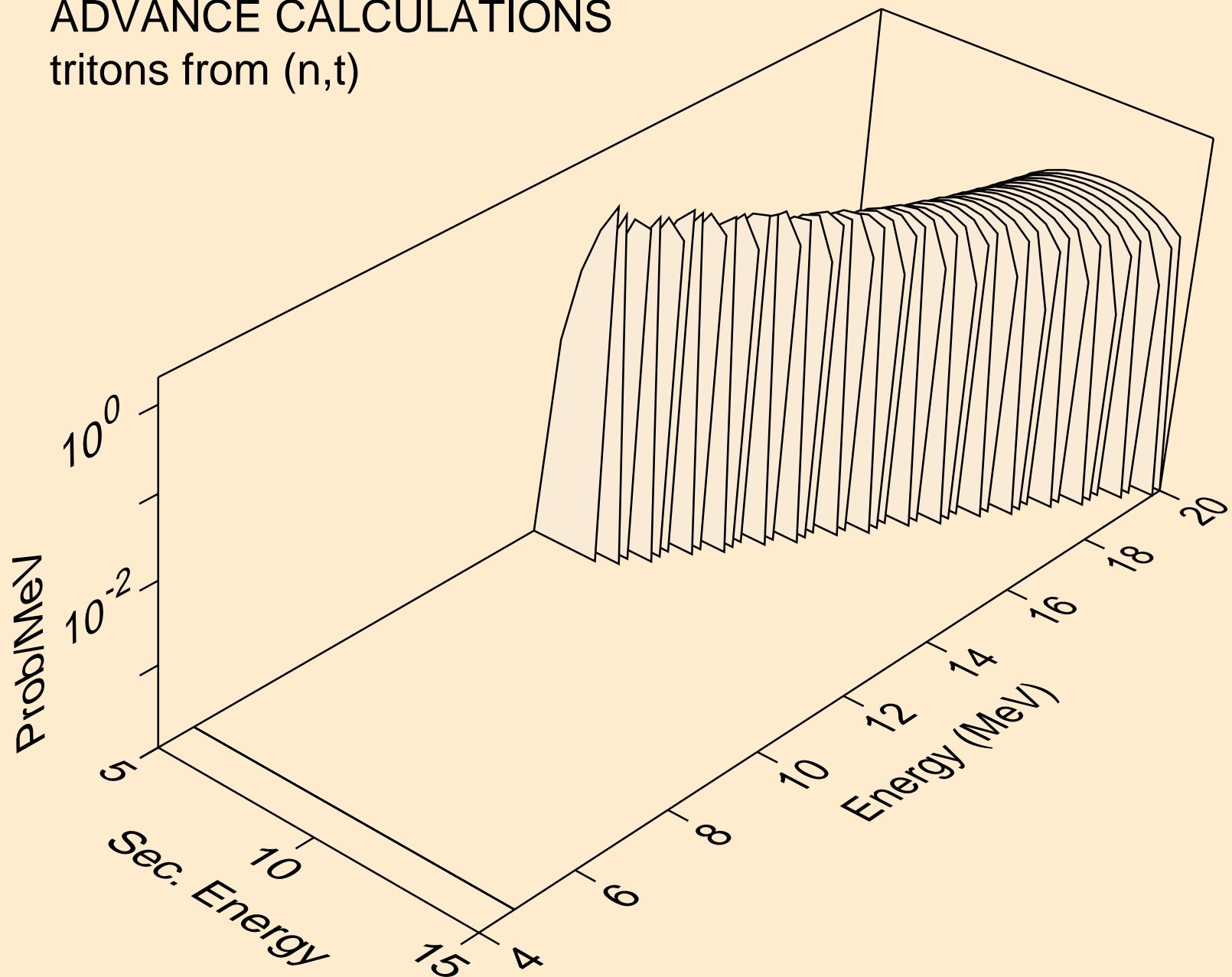
# ADVANCE CALCULATIONS

## deuterons from (n,d)



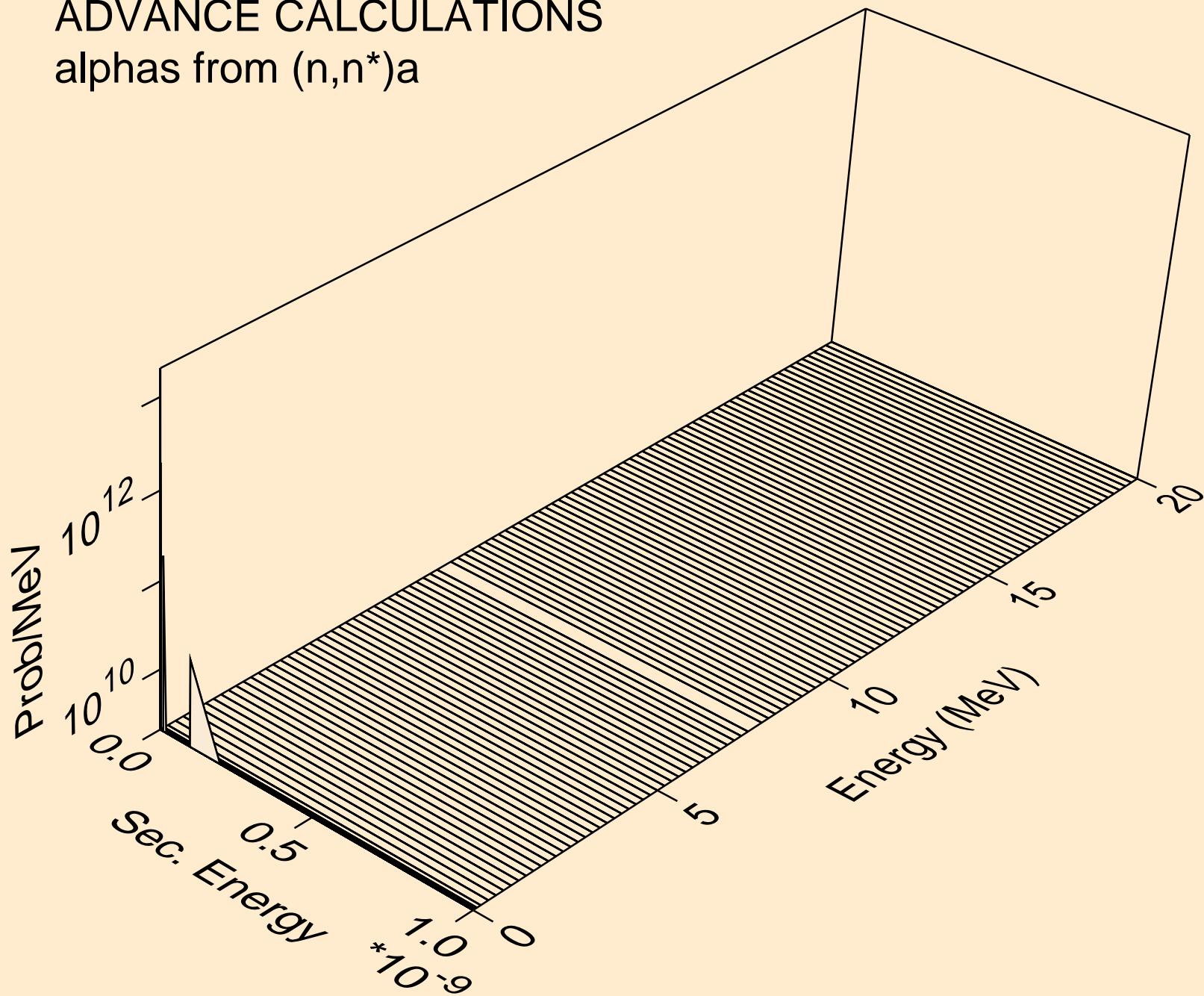
# ADVANCE CALCULATIONS

## tritons from (n,t)



# ADVANCE CALCULATIONS

alphas from  $(n,n^*)a$



# ADVANCE CALCULATIONS

alphas from (n,a)

